Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

# STATE OF MISSOURI OF NATURAL RESOURCES

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MAY 03 2011

Mr. Mark A. Smith Air Permitting and Compliance Branch Chief EPA Region 7 901 North 5<sup>th</sup> Street Kansas City, KS 66101

RE:

Part 70 Operating Permit, Project: 2005-02-010

Response to EPA Comments

Dear Mr. Smith,

The Missouri Air Pollution Control Program (APCP) has received your comments submitted during the EPA comment period on the draft Part 70 Operating Permit for Ameren - Labadie (071-0003).

The Air Pollution Control Program has revised the draft operating permit in response to these comments. Enclosed is the Air Pollution Control Program's response to these comments and a copy of the revised operating permit which is being forwarded for final executive approval and issuance.

If you have any questions or additional comments, please do not hesitate to contact me at the Department's Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, or by telephone at (573) 526-0189. Thank you for your time and attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Alana L. Rugen

Environmental Engineer II

ALR/kjc

**Enclosures:** 

Final Title V Operating Permit

Response to EPA Comments

c:

St. Louis Regional Office PAMS File 2005-02-010



Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

# DEPARTMENT OF NATURAL RESOURCES

www.dnr.mo.gov

### **MEMORANDUM**

DATE:

April 27, 2011

TO:

2005-02-010, Ameren - Labadie

FROM:

Alana L. Rugen, Environmental Engineer II

SUBJECT:

Response to EPA Comments

The draft Part 70 Operating Permit for Ameren – Labadie (071-0003) was placed on public notice as of July 1, 2010, for a 30-day comment period. The public notice was published on the Department of Natural Resources' Air Pollution Control Program's web page at: <a href="http://www.dnr.mo.gov/env/apcp/PermitPublicNotices.htm">http://www.dnr.mo.gov/env/apcp/PermitPublicNotices.htm</a> on Thursday, July 1, 2010. On July 30, 2010, the Air Pollution Control Program received five (5) comments from Ameren Corporation; the comments were submitted electronically on the Air Pollution Control Program website. On July 30, 2010, the Air Pollution Control Program received eleven (11) comments from the Interdisciplinary Environmental Clinic at Washington University School of Law (IEC) on behalf of the Sierra Club; the comments were submitted electronically on the Air Pollution Control Program website.

The draft Part 70 Operating Permit for Ameren – Labadie (071-0003) was granted a Public Hearing per the request of the Interdisciplinary Environmental Clinic at Washington University School of Law (IEC) on behalf of the Sierra Club. Prior to the Public Hearing, comments were submitted by an Air Pollution Control program staff member to be included with the Public Hearing comments. The Public Hearing was held at 7 p.m. on Thursday, October 21, 2010, at the Labadie Elementary School in Labadie, MO. During the Public Hearing the court reporter recorded twenty-two (22) official statements. The Missouri Air Pollution Control Program also accepted seven (7) comments submitted by e-mail on Friday October 22, 2010.

The draft Part 70 Operating Permit and Response to Public Comments document for Ameren – Labadie (071-003) were sent to EPA Region 7 on Thursday, March 17, 2011, for EPA's 45-day comment period. On Tuesday, April 26, 2011, the Air Pollution Control Program received three (3) comments from the EPA; these comments will be addressed within this Response to EPA Comments document.

The Missouri Department of Natural Resources' Air Pollution Control Program appreciates the amount of public participation during the public notice and hearing for Ameren – Labadie's Title V permit. Some of the comments received during the public participation process relate to items the Department has no authority to change or modify and; therefore, the Department has not responded to these comments. Due to the quantity of comments received, comments have been

summarized, abbreviated, or paraphrased for clarity and brevity. Comments regarding similar topics have been grouped for brevity.

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The Missouri Air Pollution Control Program shall now address comments submitted regarding Ameren – Labadie's January 2010 EPA-issued Notice of Violation (NOV). The comments regarding the NOV submitted by students and faculty of the Interdisciplinary Environmental Clinic at Washington University School of Law (IEC) on behalf of the Sierra Club and Labadie Residents: Amy Bonsall, Robyn Dunkin, Henry Robertson, Petra Haynes, Tim Coles, and Donna Hill have been summarized and consolidated for clarity and brevity.

# Public Comments regarding the January 2010 EPA-issued Notice of Violation (NOV):

The Title V permit does not include all applicable requirements:

- The Title V permit lacks a compliance schedule for remedying significant, ongoing violations of the Clean Air Act:
  - O Ameren failed to obtain the necessary preconstruction permits, failed to install required pollution control technology, and continues to operate without required technology-based emissions limitations as stated within the NOV issued to them January 2010 by the US EPA.
    - If Ameren had handled the upgrades with proper notification and construction permit approval, there would be far less sulfur oxide, nitrogen oxide, and particulate matter in the air in an area already designated by EPA as non-attainment for ozone and PM<sub>2.5</sub>.
  - O Ameren failed to submit a complete Title V permit application. The Title V permit application did not contain information regarding the major modifications as asserted by EPA within the NOV.
  - o The Title V permit should include a compliance schedule for the violations noted within the NOV.

EPA and Ameren are still in the early stages of resolution with respect to the January 2010 NOV.

The Missouri Air Pollution Control Program receives its authority to issue and enforce Title V permits from the EPA; therefore, the Missouri Air Pollution Control Program looks to the EPA for guidance during the permitting process. In the October 16, 2009 EPA Order regarding a permit issued by the Indiana Department of Environmental Management to BP Products North America, Inc Whiting Business Unit (available at:

http://www.epa.gov/region07/air/title5/petitiondb/petitions/bpwhiting\_response2008.pdf), Lisa P. Jackson, EPA Administrator, states:

"An NOV is simply one early step in the EPA's process of determining whether a violation has, in fact, occurred. This step commonly is followed by additional investigation or discovery, information gathering, and exchange of views that occur in the context of an enforcement proceeding and that are considered important means of fact-finding under our system of civil litigation. An NOV is not a final agency action and is not subject to judicial review. It is well-recognized that no binding legal consequences flow from an NOV, and an NOV does not have the force or effect of law."

"EPA may consider an NOV's issuance or complaint's filing as a relevant factor when determining whether the overall information presented by the petitioner - in light of all the factors that may be relevant - demonstrates the applicability of a requirement for Title V purposes. Other factors that may be relevant in this determination include the quality of the information, whether the underlying facts are disputable, the types of defenses available to the source, and the nature of any disputed legal questions, all of which would need to be considered within the constraints of the Title V process. If, in any particular case, these factors are relevant and the petitioner does not present information concerning them, then EPA may find that the petitioner has failed to present sufficient information to demonstrate that the requirement is applicable."

As EPA does not consider the NOV issued to Ameren to be legally binding, the Missouri Air Pollution Control Program does not either.

EPA considers the potential impact enforcement cases and Title V decisions have on one another. In cases where EPA has initiated an enforcement action at the same time as the permitting authority is taking action on a Title V permit application, the source and EPA could find themselves in two separate actions, litigating essentially the same issues – whether a substantive rule was violated and the appropriateness of a compliance schedule – with the risk of potentially different and conflicting results. To avoid such circumstances, actions are best left out of the Title V permitting process. Once limits are established in a construction permit, consent decree, or court order, the requirements would then be included in the Title V permit.

In the BP Whiting Petition, the EPA Administrator determined that the petitioners did not provide enough evidence to substantiate their position – that the Title V permit failed to meet the requirements of the Clean Air Act. The Administrator stated, "Petitioners have failed to

demonstrate that the BP Whiting facility is out of compliance with the requirements addressed in the NOV, and that the permit must include a compliance plan and schedule with regard to such requirements. I therefore deny the petition with respect to this issue."

EPA has not granted the Missouri Air Pollution Control Program the authority to resolve federally issued NOVs; therefore, the Missouri Air Pollution Control Program cannot draft a compliance plan and schedule for incorporation within the Title V permit.

EPA has consistently determined that a compliance schedule is not required when an NOV has been issued to a source. See, also

http://www.epa.gov/region07/air/title5/petitiondb/petitions/valero\_decision2004.pdf http://www.epa.gov/region07/air/title5/petitiondb/petitions/georgiapowerrenewals\_decision2005\_2006.pdf

This Title V permit is a renewal. Ameren – Labadie is currently operating under Title V permit OP2000-008A issued in 2000. Title V permits are required to be renewed every five years, but due to the complexity of the project and the project backlog at Missouri's Air Pollution Control Program, the installation's renewal application (submitted in 2005) has only recently been technically reviewed and a renewal Title V drafted. The installation has operated under their current Title V permit for over ten years – five years past the original effective date of the permit. Resolution of similar NOVs has taken years to complete; therefore, the Missouri Air Pollution Control Program is obligated to issue the Title V permit at this time rather than wait for an additional unknown number of years until EPA and Ameren finalize a compliance plan and schedule.

Based on the above EPA guidance, until a compliance plan and schedule are finalized, there are no provisions to be incorporated into the Title V permit, thus, the permit contains all applicable requirements which are currently effective at the time of permit issuance per the requirements of §70.6(a)(1). If Ameren and EPA resolve the January 2010 NOV with a compliance plan and schedule, the Title V permit shall be reopened for cause per the provisions of 10 CSR 10-6.065(6)(E)6.A.(III) to include the EPA-approved compliance plan and schedule."

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The Missouri Air Pollution Control Program shall now address comments submitted regarding water concerns at Ameren – Labadie. The water concerns were voiced by Labadie residents: Amy Bonsall, Al Lintzenich, Sue Blaine, Cheryl McQuerry, Dave Greely, Jan Mound, and Ray Jaycox. Comments have been summarized and consolidated for clarity and brevity.

#### Public Comments regarding water concerns at Ameren - Labadie:

Ameren's water permit application submitted in 1992 states that there are two seeps coming from the impoundments that are currently on the plant grounds. Ameren – Labadie is leaching 33 to 35 gallons per minute into the soil and the groundwater. – Amy Bonsall

Is anyone having trouble with their wells? -Al Lintzenich

As Ameren requests a permit to allow emissions into the atmosphere, I ask that they be required to significantly decrease the quantity of material released into the atmosphere. Once these compounds are released, they cannot be collected for disposal. Instead, these materials become part of the water many of us drink. – Sue Blaine

I am having my well tested at this time by an independent lab on the east coast. – Cheryl McQuerry

I hope the Missouri Department of Natural Resources will also be involved and host public meetings when the water permits are reviewed. – Dave Greely

We have heard about an ash containment system in Tennessee that got flooded and ruined all of the drinking water wells in the area. – Jan Mound and Ray Jaycox

### Missouri Air Pollution Control Program Response to Public Comments:

Water concerns do not fall under the purview of this permit. This permit is being issued by the Missouri Air Pollution Control Program. The Missouri Air Pollution Control Program is part of the Missouri Department of Natural Resources' Division of Environmental Quality. The Missouri Air Pollution Control Program is tasked with maintaining the purity of Missouri's air to protect the health, general welfare and property of the people of Missouri. Missouri's Water Protection Program has been notified of your water concerns.

Missouri's Water Protection Program now places draft water permits on its website for public notice (see <a href="http://www.dnr.mo.gov/env/wpp/permits/permit-pn.htm">http://www.dnr.mo.gov/env/wpp/permits/permit-pn.htm</a>). In order to obtain a public hearing on a draft water permit, you must request a public hearing during the draft water permit's public notice comment period per 10 CSR 20-6.020(4)(A)1. (To view the regulation visit: <a href="http://www.sos.mo.gov/adrules/csr/current/10csr/10c20-6b.pdf">http://www.sos.mo.gov/adrules/csr/current/10csr/10c20-6b.pdf</a>).

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The Missouri Air Pollution Control Program shall now address comments submitted regarding Ameren's proposed landfill in Labadie, Missouri. The comments were submitted by Labadie Residents: Amy Bonsall, Al Lintzenich, Ruth Campbell, Sue Blaine, Tim Coles, Jan Mound, and Ray Jaycox. Comments have been summarized and consolidated for clarity and brevity.

# Public Comments regarding Ameren's proposed landfill in Labadie, Missouri:

Given the potential placement of a coal ash landfill near the plant, we have a greater need for a full understanding of Ameren's air emission requirements and their tracking records here in Franklin County. – Amy Bonsall

What would the impact of the proposed large disposal area where they are dumping different type of minerals and ash be on Labadie, Missouri? There would be 15 different kinds of minerals. What can I do about it? – Al Lintzenich

Before renewing the Title V permit for the electric plant, I would like to know exactly what effect the emissions, the waste products, and the landfill will have on our environment. – Ruth Campbell

As Ameren requests a permit to allow emissions into the atmosphere, I ask that they be required to significantly decrease the quantity of material released into the atmosphere. Once these compounds are released, they cannot be collected for disposal. Instead, these materials become part of the ground in which our food is grown. – Sue Blaine

How did this go from a conditional use permit to a permitted use for the coal ash dump? – Tim Coles

We have heard about a similar ash containment system in Tennessee that got flooded and ruined all of the drinking water wells in the area. Will there be ash transferred from other plants by boat, rail, or truck and if there is, who will monitor the blow off from these vehicles? – Jan Mound and Ray Jaycox

#### Missouri Air Pollution Control Program Response to Public Comments:

Concerns regarding the proposed landfill do not fall under the purview of this permit. This permit is being issued by the Missouri Air Pollution Control Program. The Missouri Air Pollution Control Program is part of the Missouri Department of Natural Resources' Division of Environmental Quality. The Missouri Air Pollution Control Program is tasked with maintaining the purity of Missouri's air to protect the health, general welfare and property of the people of Missouri. Missouri's Solid Waste Management Program had a staff member attend the public hearing and is aware of your concerns.

Ameren – Labadie is not permitted to receive fly ash from other installations within the Title V permit. The installation is not permitted to operate a fly ash landfill. Ameren's proposed fly ash landfill does not fall under the purview of the Title V permit. Prior to constructing the proposed landfill, Ameren is required to obtain a permit from Missouri's Solid Waste Management Program (visit the Solid Waste Management Program's website at: <a href="http://www.dnr.mo.gov/env/swmp/index.html">http://www.dnr.mo.gov/env/swmp/index.html</a>).

The installation is permitted to operate a dry fly ash system which they received a construction permit for in 1992. The major components of the system are two silos and fly ash ponds. The dry fly ash system does not include a landfill similar to Tennessee Valley Authority's Kingston Fossil Plant's faulty landfill.

In 2006, Ameren – Labadie began recycling more than 10,000 tons of fly ash and 60,000 tons of bottom ash annually. This ash is used to produce about two million bags of high-quality concrete mix annually. Approximately 160,000 tons of fly ash from Ameren's Meramec plant was mixed into the concrete used to rebuild Taum Sauk's upper reservoir.

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The comments submitted electronically to the Missouri Air Pollution Control Program's website by Ameren Corporation on July 30, 2010, shall now be addressed. Comments may have been summarized, abbreviated, or paraphrased for clarity and brevity.

### Comment No. 1, submitted by Ameren Corporation:

Page 4 – "Emission Units With Limitations": Please revise the description of the emission units as follows.

Emergency Diesel Generator, B5; change to IC-1 Emergency Diesel Generator, B6; change to IC-2 (2) Diesel Driven Fire Pumps, IC-3 and IC-4 Coal Pile Stackout, P8; change to M4 Dry Fly Ash System, P7; change to M5

# Missouri Air Pollution Control Program Response to Public Comment:

The emission unit relabeling has been completed as requested. An e-mail has been sent to the Environmental Inventory Questionnaire (EIQ) unit [also with the Air Pollution Control Program] with a similar request to update AmerenUE – Labadie's future EIQ submissions.

# Comment No. 2, submitted by Ameren Corporation:

Page 5 – "Emission Units Without Limitations":

The Labadie Plant has two Fuller Model 48DS8 Jet Pulse Dust Collectors on the lime storage silos for the existing water treatment plant. These dust collectors control air emissions when the water treatment plant is receiving bulk deliveries of hydrated lime to the lime storage silos and operate only during lime deliveries. The Labadie Plant typically receives bulk hydrated lime once every month or two. The dust collectors have instrumentation to measure pressure drop across the filters but these readings are not automatically recorded.

The dust collectors and lime storage silos have been part of the plant since its inception. These emission sources were inadvertently omitted in the Labadie Part 70 permit renewal application. We request that these dust collectors be included in the list of emission units without limitations.

# Missouri Air Pollution Control Program Response to Public Comment:

These emission units without limitations have been included within the permit as requested.

### Comment No. 3, submitted by Ameren Corporation:

Page 14 – Please make the following revisions to "(EU0005 through EU0007) – Emergency Engines":

- 1) Change the EIQ reference number for emission unit EU005 from B5 to IC-1.
- 2) Change the EIQ reference number for emission unit EU006 from B6 to IC-2.
- 3) Change the EIQ reference numbers for emission unit EU007 to be IC-3 and IC-4.

### Missouri Air Pollution Control Program Response to Public Comment:

The emission unit relabeling has been performed as requested.

### Comment No. 4, submitted by Ameren Corporation:

Page 17 – Please make the following revisions to "(EU0008 through EU0011) – Coal Handling and Storage":

Change the EIQ reference number for emission unit EU011 from P8 to M4.

#### Missouri Air Pollution Control Program Response to Public Comment:

This emission unit relabeling has been performed as requested.

### Comment No. 5, submitted by Ameren Corporation:

Page 26 – Please make the following revisions to "EU0014 – Dry Fly Ash System":

Change the EIQ reference number for emission unit EU014 from P7 to M5.

### Missouri Air Pollution Control Program Response to Public Comment:

This emission unit relabeling has been performed as requested.

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The comments submitted by the Interdisciplinary Environmental Clinic at Washington University School of Law (IEC) on behalf of the Sierra Club shall now be addressed. Comments were submitted both electronically July 30, 2010, to the Missouri Air Pollution Control Program's website and orally during the Public Hearing held October 21, 2010. The comments were submitted by IEC faculty members Kate Pawasarat and Maxine Lipeles and IEC students Will Bucher, Joshua Scott. Comments have been summarized, abbreviated, or paraphrased for clarity and brevity.

# Comment No. 1, submitted by the Interdisciplinary Environmental Clinic:

The Title V permit lacks a compliance schedule for newly-applicable requirements that will become effective during the permit term.

# Missouri Air Pollution Control Program Response to Public Comment:

Section 505(b)(2) of the Clean Air Act, 42 U.S.C. § 7661d(b)(2), states that EPA cannot object to a permit unless the commenter can show that the draft permit is not in compliance with applicable requirements under the Clean Air Act. The definition of "applicable requirements," in 40 C.F.R.§70.2, does not include future regulations under the Clean Air Act.

In the January 8, 2007 EPA Order regarding a permit issued by the Georgia Environmental Protection Division to Bowen Steam-Electric Generating Plant (available at: <a href="http://www.epa.gov/region07/air/title5/petitiondb/petitions/georgiapowerrenewals\_decision2005\_2006.pdf">http://www.epa.gov/region07/air/title5/petitiondb/petitions/georgiapowerrenewals\_decision2005\_2006.pdf</a>). EPA stated,

"Petitioner has asked EPA to object to these permits and require a compliance schedule to ensure future compliance with opacity standards. Section 505(b)(2) of the Act states that the Administrator shall issue an objection if the petitioner demonstrates to the Administrator that the permit is not in compliance with applicable requirements of the Act. EPA will not object to a permit where, as here, the Petitioner has provided no specific evidence to demonstrate that the permit is not in compliance with the Act."

EPA has made similar determinations in other orders. *See, e.g.* <a href="http://www.epa.gov/region07/air/title5/petitiondb/petitions/marcal\_new\_jersey\_decision2006.pdf">http://www.epa.gov/region07/air/title5/petitiondb/petitions/marcal\_new\_jersey\_decision2006.pdf</a>

The Title V permit contains all applicable requirements which are currently promulgated at the time of permit issuance per the requirements of §70.6(a)(1). Compliance with the conditions of the Title V permit does not demonstrate compliance with any applicable requirements that become effective after the date of the permit issuance as 10 CSR 10-6.065(6)(C)6.A states: "Compliance with the conditions of the permit shall be deemed compliance with all applicable requirements as of the date of the permit issuance." Compliance with applicable newly effective regulations shall be demonstrated through the initial and continuous compliance demonstration methods detailed within the newly effective regulation until the permit is renewed, reopened, or revised per the provisions of 10 CSR 10-6.065(6)(E). Permit renewal, reopening, or revision

shall be completed no later than 18 months after promulgation of the newly applicable requirement unless the effective date of the newly applicable requirement is later than the date on which the permit is set to expire per the requirements of  $\S70.7(f)(1)(i)$ .

# Comment No. 2, submitted by the Interdisciplinary Environmental Clinic:

The Title V permit lacks periodic monitoring and includes inadequate compliance assurance monitoring requirements regarding the plant's PM emissions:

- The CAM plan is inadequate:
  - o The CAM plan's excursion level does not provide a significant margin of compliance.
  - o The CAM plan does not address condensable PM.
  - o Opacity monitoring is not indicative of compliance with the PM standard.
  - o The presence of the word "likely" within the CAM plan causes ambiguity in exceedance determinations.
- The Title V permit fails to include periodic monitoring sufficient to assure compliance:
  - o The Title V permit provides no mention of periodic monitoring.
  - o The CAM plan does not constitute adequate periodic monitoring.
  - o The Title V permit fails to include PM monitoring requirements from applicable state regulations.
  - The monitoring requirements associated with applicable state regulations, even if supplemented with a monitoring frequency, would not constitute adequate periodic monitoring.
  - The installation should be required to monitor their filterable particulate emissions using a continuous emissions monitoring system.
  - The installation should be required to perform stack testing to determine their condensable particulate emissions.

# Missouri Air Pollution Control Program Response to Public Comment:

#### (1) Excursion Level:

- It is important to note that the letter referenced by the commenter did not state that an installation must have a 70% margin of compliance when using opacity to determine compliance with a PM limit. The letter only suggests that a 70% margin of compliance would be acceptable. Moreover, the letter does not say that a 10% margin of compliance would he unacceptable.
- The CAM plan's excursion level is set with a 10% margin of compliance or better
  consistent with EPA's presumptively acceptable CAM plan for PM controlled by ESPs
  on coal-fired boilers (available at: <a href="http://www.epa.gov/ttn/emc/cam/espcam.pdf">http://www.epa.gov/ttn/emc/cam/espcam.pdf</a>);
  therefore, no change to the excursion level is necessary.
- As the boilers are all opacity-limited (i.e. they will exceed their opacity limitations under 10 CSR 10-6.220 prior to an excursion and/or exceedance under 10 CSR 10-5.030), corrective action is required when the opacity standard is exceeded. The opacity standard is 20% with one six minute exception up to 40% per hour; therefore, corrective action is required to limit opacity (and thus decreasing/limiting PM) prior to any excursion or exceedance of 10 CSR 10-5.030 providing an additional margin of compliance.

### (2) Condensable PM:

- e EPA states that the purpose of Compliance Assurance Monitoring (CAM) is to conduct monitoring to determine that control measures, once installed or otherwise employed, are properly operated and maintained so that they continue to achieve a level of control that complies with applicable requirements (from CAM Technical Guidance Document available at: <a href="http://www.epa.gov/ttnchie1/mkb/documents/TSD\_1.pdf">http://www.epa.gov/ttnchie1/mkb/documents/TSD\_1.pdf</a>). The CAM plan for Ameren Labadie was designed to assure the ESPs on Boiler Units 1, 2, 3, and 4 continue to achieve a level of control demonstrating compliance with the PM emission limitation of 10 CSR 10-5.030.
- ESPs on coal-fired boilers show a fractional collection efficiency greater than 99% for fine (less than 0.1 micrometer) and coarse particles (greater than 10 micrometers) and a reduced collection efficiency for particle diameters between 0.1 and 10 micrometers (from AP-42 1.1.4.1). AP-42's definition of coarse particles within 1.1.4.1 as particles greater than 10 μm, would exclude PM<sub>2.5</sub> and condensables. As the majority of particulate emission reductions due to ESP control are on the filterable coarse particles, the CAM plan was written to assure that the ESP continued to collect the filterable coarse particles at an efficiency sufficient to demonstrate compliance with the 10 CSR 10-5.030 PM emission limitation.
- The PM emission limitation within 10 CSR 10-5.030 was initially created in 1967. Condensable PM was not originally intended to be regulated at that time as condensable PM only became a consideration within the past decade.
  - The definition of particulate matter in 10 CSR 10-6.020 was updated in Missouri's SIP on February 28, 2006, along with ambient monitoring methods for PM<sub>2.5</sub> in 10 CSR 10-6.030. Missouri's application for the SIP revisions specified that the revisions provided for proper *ambient* monitoring for the 1998 PM<sub>2.5</sub> NAAQS. EPA Region 7 approved the changes.
  - 10 CSR 10-5.030 was not revised in the February 28, 2006 SIP revisions, therefore, the emission limits for coarse, filterable PM remained the same.
     Because specific limits have not been set for PM<sub>10</sub> or PM<sub>2.5</sub> in 10 CSR 10-5.030 there is no requirement to create these limits within the Title V permit
  - o "Sampling Methods for Air Pollution Sources" (found in 10 CSR 10-6.030) identifies the *stack* sampling methods used to verify compliance with Missouri's PM, PM<sub>10</sub>, and PM<sub>2.5</sub> emission limitations. For Ameren Labadie, EPA Reference Methods 5 or 17 [found at 10 CSR 10-6.030(5)(A) and (B)] are the appropriate sampling methods for the PM limits found in 10 CSR 10-5.030. These methods quantify, under controlled stack conditions, only the *coarse*, *filterable* PM concentration in the stack gas.
  - While the Missouri Air Pollution Control Program and EPA can require sources to measure condensible PM to better inform any air quality modeling done in support of a fine PM control strategy, the condensible fraction is not a regulatory component of the SIP-approved coarse, filterable PM emission limits in 10 CSR 10-5.030, and therefore does not need to be sampled to verify compliance with the 0.12 lb/mmBtu limit in the Title V permit or for any correlations established pursuant to the periodic monitoring or the CAM plan requirements.

• Ameren – Labadie is currently operating under OP2000-080A, issued August 3, 2000. Due to length of time the installation has been operating under their current permit (over ten years for a five year permit), the Missouri Air Pollution Control Program would like to issue the more stringent draft permit without further delay. The Missouri Air Pollution Control Program is requiring stack testing and PM to Opacity correlation in the permit as a sufficient placeholder to demonstrate compliance with 10 CSR 10-5.030 and 40 CFR Part 64 until new stack testing and correlation can be performed. The permit has been revised to require new stack testing be performed using Method 17 for filterable PM no later than one year after permit issuance and an amendment submitted to update the CAM requirements no later than 6 months after the date of the stack testing.

### (3) Periodic Monitoring:

- The installation performed stack testing using Method 17, 10 CSR 10-5.030 does not require repeat performance testing; therefore, subsequent periodic monitoring is not required. However, due to changes in the particulate emissions profile as the boilers age, the Missouri Air Pollution Control Program is requiring repeat stack testing every three years. The installation performs continuous opacity monitoring to determine proper ESP operation and compliance with the PM emission limitation. Annual stack testing is not required by 10 CSR 10-5.030 or 40 CFR 64.
- The CAM rule does not require periodic monitoring in addition to continuous monitoring. Continuous emissions monitoring through the use of a continuous emissions monitoring system such as the continuous opacity monitoring system required to demonstrate compliance with 40 CFR 64 and 10 CSR 10-5.030 within the permit allow the permittee to demonstrate continuous compliance with the regulations a more stringent method of compliance than periodic monitoring. EPA addressed the relationship between CAM and periodic monitoring within the preamble to the CAM rule (available on Page 48 of the EPA's Title V Task Force's Final Report to the Clean Air Act Advisory Committee available at:

http://www.epa.gov/air/caaac/tvtaskforce/title5\_taskforce\_finalreport20060405.pdf):

"As noted in the 1993 [enhanced monitoring] proposal, because part 64 contains applicable monitoring requirements sufficient to demonstrate compliance with applicable emission limitations or standards, the part 70 periodic monitoring requirements will not apply to the emissions units and applicable requirements covered by part 64. This conclusion is equally applicable under the final part 64 rule."

# (4) "A PM exceedances has likely occurred":

• The CAM plan's reference to emissions having "likely" occurred has been removed to avoid confusion; however, it should be noted that excess emissions may be excused under 10 CSR 10-6.050 provided the installation has submitted the proper notification to the Missouri Department of Natural Resources' Air Pollution Control Program documenting the excess emissions were the result of malfunction, start-up, or shutdown (these notifications are reviewed by the director or the commission to determine if the excess emissions shall be viewed as a violation or waived as the consequence of malfunction, start-up, or shutdown).

#### (5) PM CEMS:

- The boilers are required to have COMS per 10 CSR 10-6.220(3)(E)1; requiring a PM CEMS when COMS is already installed and stack testing has already been performed to provide a PM emissions to opacity correlation would be an unnecessary financial burden upon the installation. A PM CEMS is not a listed requirement anywhere within 10 CSR 10-5.030 or 40 CFR 64, nor is a PM CEMS used within EPA's presumptively acceptable CAM plan for PM controlled by ESPs on coal-fired boilers; therefore, Ameren Labadie is not required to install, operate, or maintain a PM CEMS at this time.
- A continuous opacity monitoring system may be used as a surrogate to monitor particulate emissions as demonstrated within EPA's presumptively acceptable CAM plan for PM controlled by ESPs on coal-fired boilers (available at: http://www.epa.gov/ttn/emc/cam/espcam.pdf); therefore, a PM CEMS is not required.

### Comment No. 3, submitted by the Interdisciplinary Environmental Clinic:

The Title V permit contains inadequate periodic monitoring requirements to ensure compliance with opacity limits.

### Missouri Air Pollution Control Program Response to Public Comment:

The only emission units required by 10 CSR 10-6.220(3)(E) to demonstrate compliance with continuous opacity monitoring systems are coal-fired steam generating units with a maximum heat input rate grater than 250 mmBtu/hr, Portland cement calcining kiln operations, and any source required to operate a continuous opacity monitoring system under 40 CFR Part 60. The emission units in questions are EU0008 Coal Unloading, EU0009 Coal Storage Pile, EU0010 Coal Transfer & Conveying, EU0011 Coal Pile Stackout, and EU0014 Dry Fly Ash System - as such these emission units are not required to operate and maintain a continuous opacity monitoring system. The monitoring schedule included within Permit Conditions (EU0008 through EU0011) - 001 and EU0014 - 002 has been employed by the Missouri Air Pollution Control Program for many years. The schedule provides an incentive (i.e. reduced monitoring) for remaining in compliance. The schedule begins with weekly monitoring to ensure compliance with the opacity limitation. After eight readings (8 weeks ~ 2 months) demonstrating compliance at this monitoring frequency, the installation is allowed to decrease monitoring to once every two weeks. After four readings (8 weeks ~ 2 months) demonstrating compliance at this monitoring frequency, the installation is allowed to decrease monitoring to once each month. If at any time the installation exceeds the opacity standard they are required to revert back to weekly monitoring beginning the schedule again. This schedule has been proven effective by its many years of practical implementation. Increased monitoring would reduce the incentive to remain in compliance and prove unnecessarily burdensome to the installation. The installation does not have a history of habitually violating this schedule for these emission units. If the installation should demonstrate frequent violations, the Missouri Air Pollution Control Program's Enforcement Section has the right to issue Notice of Violations and require a compliance plan.

### Comment No. 4, submitted by the Interdisciplinary Environmental Clinic:

The Title V permit fails to ensure that the plant will not cause or contribute to violations of the new one-hour NAAQS for SO<sub>2</sub>.

### Missouri Air Pollution Control Program Response to Public Comment:

The new SO<sub>2</sub> NAAQS has been incorporated into the Title V permit. The new standard was not effective until August 23, 2010.

The new SO<sub>2</sub> NAAQs does not by itself impose any obligation on the installation. Missouri must first evaluate the state and determine which areas are in attainment and nonattainment. Areas designated as nonattainment by Missouri and approved by the EPA will be subject to SO<sub>2</sub> emission reduction standards as promulgated by Missouri for incorporation into Missouri's EPA-approved State Implementation Plan. If Missouri promulgates any new standards to reach attainment with the new SO<sub>2</sub> NAAQS which are applicable to the installation the permit shall be reopened/revised no later than 18 months after the standards promulgation unless the effective date of the newly applicable requirement is later than the date on which the permit is due to expire per the requirements of §70.7(f)(1)(i).

The Missouri Air Pollution Control Program would also like to note that the  $SO_2$ ,  $H_2S$ , and  $H_2SO_4$  NAAQS were included in the Title V permit due to the requirements of 10 CSR 10-6.260(3)(B):

"Restriction of Concentration of Sulfur Compounds in the Ambient Air. In addition to the limitations specified in subsections (3)(A), (3)(C), and (3)(D) of this rule, no person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards. Except as may be specified elsewhere in this rule, the methods for measuring ambient sulfur compound concentrations are specified in 10 CSR 10-6.040."

10 CSR 10-6.260(3)(B) is not SIP approved and; therefore, not federally enforceable. To clarify this distinction within the Title V permit under each application of 10 CSR 10-6.260(3)(B) the following has been added:

"This requirement is not federally enforceable. This requirement can only be directly enforced by the State of Missouri."

### Comment No. 5, submitted by the Interdisciplinary Environmental Clinic:

The Title V permit contains numerous provisions that lack practical enforceability.

The Missouri Air Pollution Control Program has been using the permit language in question for close to 30 years without any detrimental effect to the quality of Missouri's air. Practical implementation over the past 30 years has proven the effectiveness of the wording and proven to be protective of the standards they were intended for; however, if inspectors should note improper adherence within any of the provisions, the permit can be reopened to incorporate more specific wording.

- (1) "Manufacturer's specifications" and/or "industry standards":
  - Permit Condition EU0007 002 Recordkeeping Requirement 1.c comes directly from the federal regulation §63.6625(e); therefore, no further clarification is necessary. The Air Pollution Control Program is requiring the installation to maintain the manufacturer's specifications (or the site specific maintenance plan) onsite for inspection purposes.

"If you own or operate an existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions, an existing stationary emergency RICE, or an existing stationary RICE located at an area source of HAP emissions not subject to any numerical emission standards shown in Table 2d to this subpart, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions."

- Permit Condition (EU0008 through EU0011) 001, Monitoring Requirements:
  - o 4.a)i)(1) and 4.b)i)(1): . The installation is now required to retain documentation of the ASTM standards complied with while applying pavement to and maintaining the pavement on the haul road.
  - 4.a)ii)(1) and 4.b)ii)(1): The reference to "manufacturer's suggested application rate" is necessary as different chemical dust suppressants have different application rates. It is not the goal of the Air Pollution Control Program to unnecessarily restrict the installation to a specific chemical dust suppressant so that a specific application rate can be included within the permit. The permittee is now required to retain the manufacturer's specifications for the chemical dust suppressant on site so that inspectors can verify the amount and frequency of chemical dust suppressant application is consistent with the "manufacturer's suggested application rate.
- Permit Condition EU0014 001
  - O The Operation Limitation was incorporated into the Title V permit directly from Special Condition No. 1 of Construction Permit No. 0792-006 and has been effective since July 6, 1992. As the wording is already part of a federally enforceable construction permit, no further clarification is necessary.
  - Monitoring/Recordkeeping Requirement 1 reflects the wording contained within Special Condition No. 1 of Construction Permit No. 0792-006. A requirement has been added to the permit which requires the permittee to maintain the

manufacturer's specifications on site. The operating pressure drop will then be available to Department of Natural Resources personnel and the public upon request.

### (2) "Normal" operating conditions:

• Permit Condition EU0007 - 002, Recordkeeping Requirement 1.a comes directly from the federal regulation §63.6655(a)(5); therefore, no further clarification is necessary:

"Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation."

- Permit Condition (EU0008 through EU0011) 001, Recordkeeping Requirement 1.c; Permit Condition EU0014 002, Recordkeeping Requirement 1.c; and Attachment B have been amended to remove references to "normal" and "abnormal" visible emissions.
- Core Permit Requirement, 10 CSR 10-6.170 Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin and Attachment A have been amended to remove references to "normal".

### (3) "As soon as practicable":

Permit Condition EU0007 – 002, Operational Limitation 4 comes directly from a federal regulation - Table 2d to Subpart ZZZZ of Part 63 – Requirements for Existing Compression Ignition Stationary RICE Located at Area Sources of HAP Emissions Footnote No. 2; therefore, no further clarification is necessary:

"If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable."

General Permit Requirement 10 CSR 10-6.065(6)(C)1.C General Record Keeping and Reporting Requirements 2)d)ii comes directly from 10 CSR 10-6.065(6)(C)1.C(III)(c)II – a regulation included in Missouri's federally-approved State Implementation Plan (SIP); therefore no further clarification is necessary:

"Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable."

### (4) "As necessary":

 Permit Condition EU0007 – 002, Operational Limitation 2.c comes directly from a federal regulation – Table 2d to Subpart ZZZZ of Part 63 – Requirements for Existing Compression Ignition Stationary RICE Located at Area Sources of HAP Emissions; therefore no further clarification is necessary:

For each	You must meet the following requirement, except during periods of startup
Emergency CI and black start CI. <sup>2</sup>	Change oil and filter every 500 hours of operation or annually, whichever comes first; <sup>1</sup>
	Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and
	Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary

- Permit Condition (EU0008 through EU0011) 001, Monitoring Requirements:
  - 4.a)i)(2) and 4.b)i)(2): These references to "as necessary" are necessary, as degradation of a road surface is highly dependent upon the road surface material and the amount/type of vehicle usage. In order to specify frequency of maintenance and road repair the Missouri Air Pollution Control Program would have to limit the installation to a specific road surface material as well as limit their amount and type of vehicle activity, which would greatly hinder operational flexibility. Degradation to the physical integrity of a road surface is highly visible and not easily overlooked by the permittee or enforcement officials. Should the permittee fail to adhere with these requirements the Missouri Air Pollution Control Program can require a compliance plan with more stringent requirements. The installation is now required to obtain the frequency of the road surface maintenance/repair from ASTM standards. The installation is also required to document which ASTM standards it is complying with.
  - 0 4.a)ii)(1) and 4.b)ii)(1): These references to "as necessary" are necessary as different chemical dust suppressants have different effective periods. It is not the goal of the Air Pollution Control Program to unnecessarily restrict the installation to a specific chemical dust suppressant so that a specific re-application rate can be included within the permit. Fugitive emissions can be detected visually and are not easily overlooked by the permittee or enforcement officials. Should the permittee fail to adhere with these requirements the Missouri Air Pollution Control Program can require a compliance plan with more stringent requirements.
  - o 4.a)i)(3), 4.a)iii)(1), 4.b)i)(3) and 4.b)iii)(1): These references to "as necessary" are necessary as the amount of fugitive emissions from these sources are highly dependent upon the amount of vehicle activity and the weather. Fugitive emissions can be detected visually and are not easily overlooked by the permittee or enforcement officials. Should the permittee fail to adhere with these requirements the Missouri Air Pollution Control Program can require a compliance plan with more stringent requirements.

# (5) "All reasonable steps":

The Air Pollution Control Program cannot provide reasonable steps to minimize emissions during/after an emergency situation due to their unforeseeable nature. It is the burden of the permittee to minimize emissions as much as possible in the event of an emergency and

provide documentation for their affirmative defense. These affirmative defenses are reviewed by the Missouri Air Pollution Control Program's enforcement section. The enforcement section uses their discretion to determine whether the excess emissions should be waived due to the emergency or whether enforcement action should continue. The enforcement section bases their decision to accept or deny affirmative defenses on the exact nature of the emergency (the nature of the emergency greatly determines what measures are available to the permittee to limit excess emissions), the measures the permittee took to minimize emissions, the past compliance record of the installation, and the speed of the emergency notification by the installation.

• General Permit Requirement 10 CSR 10-6.065(6)(C)1.C General Record Keeping and Reporting Requirements 2)d)i comes directly from 10 CSR 10-6.065(6)(C)1.C(III)(c)I – a regulation included in Missouri's federally-approved State Implementation Plan; therefore, no further clarification is necessary:

"Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7. of this rule shall be submitted to the permitting authority either verbally or in writing within two (2) working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted facility must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken."

• General Permit Requirement 10 CSR 10-6.065(6)(C)7 Emergency Provisions 1)c comes directly from 10 CSR 10-6.065(6)(C)7.B – a regulation included in Missouri's federally-approved State Implementation Plan; therefore, no further clarification is necessary:

"Affirmative defense requirements. The permitting authority shall include in each permit a provision stating that an emergency or upset constitutes an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upsetbased defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:

- (I) An emergency or upset occurred and the permittee can identify the source of the emergency or upset;
- (II) The installation was being operated properly;
- (III) The permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or the requirements in the permit; and
- (IV) The permittee submitted notice of the emergency to the permitting authority within two (2) working days of the time when emission

limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken."

- (6) "Good air pollution practice" and/or "good professional practice"
  - Permit Condition EU0007 002, Operational Limitation 1 comes directly from the federal regulation §63.6605(b); therefore, no further clarification is necessary:

"At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source."

• Core Permit Requirement 10 CSR 10-6.180 Measurement of Emissions of Air Contaminants Requirement 1 comes directly from 10 CSR 10-6.180(1) – a regulation included in Missouri's federally-approved State Implementation Plan; therefore, no further clarification is necessary:

"Responsible Persons to Have Tests Made. The director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The director may specify testing methods to be used in accordance with good professional practice. The director may observe the testing. All tests shall be conducted by reputable, qualified personnel. The director shall be given a copy of the test results in writing and signed by the person responsible for the tests."

 Permit Condition EU0007 – 002, Recordkeeping Requirement 1.c comes from federal regulation – Table 6 to Subpart ZZZZ of Part 63 – Continuous Compliance With Emission Limitations and Operating Limitations; therefore, no further clarification is necessary:

For each	Complying with the requirement to	You must demonstrate continuous compliance by
Existing stationary CI RICE not subject to any numerical emission limitations	Work or Management practices	Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or  Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

# (7) "Approved by the director":

• Core Permit Requirement 10 CSR 10-6.170 Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin, Emission Limitation 1: The reference to "approved by the director" comes directly from 10 CSR 10-6.170(1)(A) – a regulation included in Missouri's federally-approved State Implementation Plan; therefore, no further clarification is necessary:

"Any person causes or allows to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the director"

### Comment No. 6, submitted by the Interdisciplinary Environmental Clinic:

The Title V permit unlawfully excuses certain emissions during startup, shutdown, and malfunctions.

# Missouri Air Pollution Control Program Response to Public Comment:

This permit condition has been reworded to adhere to the language of 10 CSR 10-6.050(3)(C) as approved by the EPA within Missouri's State Implementation Plan. The condition was moved from the emission limitation section of the condition to the reporting section.

# Comment No. 7, submitted by the Interdisciplinary Environmental Clinic:

The Title V permit improperly limits the ability of citizens to enforce the permit's requirements.

# Missouri Air Pollution Control Program Response to Public Comment:

Submittal of the monitoring data in question semi-annually would be burdensome not only on the installation, but to the permitting authority as well. It is not the goal of the Clean Air Act to be overly burdensome. The permittee is required to retain this information on site for a minimum of five years should this information need to be reviewed. Missouri Department of Natural Resources' employees may review it at any time upon request. Public citizens may request to review this data as well, so long as the data is not entitled to confidential treatment under 10 CSR 10-6.210 [10 CSR 10-6.110(3)(C)]. Public citizens may request to review any of the recordkeeping data required by this permit by submitting a request to Missouri's Air Pollution Control Program under Missouri's Sunshine Law. Air Pollution Control Program personnel will then request the information from the facility in order to complete the Sunshine request. If the

installation fails to provide the information to Missouri's Air Pollution Control Program, the installation will be in direct violation of the provisions of the operating permit and a Notice of Violation shall be issued.

This method of record retention has been proven effective over the past 30 years. Requiring the installation to submit this data semi-annually would require unnecessary usage of resources by both the installation and the Missouri Air Pollution Control Program. The permit requires the installation to report all issues of exceedances or possible exceedances semi-annually. This allows the Missouri Air Pollution Control Program to respond quickly to violations of the standards without having these exceedances obscured by copious amounts of compliant data.

# Comment No. 8, submitted by the Interdisciplinary Environmental Clinic:

The Title V permit fails to inform the public of PM<sub>2.5</sub> and CO<sub>2</sub> emissions from the plant:

- A primary goal of the Clean Air Act Title V permits is to inform the public about major sources of air emissions, including PM<sub>2.5</sub> levels, and Labadie's Title V permit would make it easier for citizens to become aware of the harmful air emissions coming from this plant.
- Not including the emission of PM<sub>2.5</sub> gives the false impression that this harmful pollutant is not emitted from the Labadie plant.

# Missouri Air Pollution Control Program Response to Public Comment:

The Reported Air Pollutant Emissions table was updated to include all emissions reported by Ameren – Labadie in their Missouri Environmental Inventory Questionnaires (EIQs) for the reporting years of 2005-2009. Ameren – Labadie was identified within the installation descriptions as a major source of Particulate Matter  $\leq 2.5$  Microns (PM<sub>2.5</sub>). Controlled potential emissions of PM<sub>2.5</sub> were added to the table within the Statement of Basis.

Missouri does not require the installation to report CO<sub>2</sub> emissions in their Missouri Emissions Inventory Questionnaire; therefore, the installation's CO<sub>2</sub> emissions were not included within the permit. The public may obtain CO<sub>2</sub> emissions data for Ameren – Labadie by visiting EPA's Clean Air Markets website at: <a href="http://camddataandmaps.epa.gov/gdm/index.cfm">http://camddataandmaps.epa.gov/gdm/index.cfm</a>. For clarification, the explanation of where to find Ameren – Labadie's CO<sub>2</sub> emissions was added to the Statement of Basis.

# Comment No. 9, submitted by the Interdisciplinary Environmental Clinic:

The Title V permit fails to include emission limits for PM<sub>2.5</sub> and CO<sub>2</sub> necessary to protect the public's health and welfare and the environment:

- The plant's CO<sub>2</sub> emissions represent a clear and present danger to public health and welfare and the environment.
- The plant's PM<sub>2.5</sub> emissions represent a clear and present danger to public health and welfare and the environment.
- The plant is a major source of PM<sub>2.5</sub> in a PM<sub>2.5</sub> nonattainment area.

The Title V permit has been revised to state that Ameren – Labadie is a major source of greenhouse gases (CO<sub>2</sub>e) in the installation descriptions on the cover page and on page 4. Plantwide potential CO<sub>2</sub>e emissions have been included within the Potential to Emit table within the Title V permit's Statement of Basis. There are no further Missouri or federal requirements for greenhouses gases applicable to the installation at this time.

The installation is a major source of PM<sub>2.5</sub> in an area currently designated nonattainment for PM<sub>2.5</sub>; however, the Missouri Air Pollution Control Program has submitted three (3) years of PM<sub>2.5</sub> monitoring data demonstrating compliance with both the 1997 and the 2006 PM<sub>2.5</sub> NAAQS. Upon EPA approval the area will be redesignated an attainment maintenance area for the 1997 PM<sub>2.5</sub> NAAQS and an attainment area for the 2006 PM<sub>2.5</sub> NAAQS. There are no PM<sub>2.5</sub> specific regulations at this time; however, PM<sub>2.5</sub> is regulated within Permit Condition (EU0001 through EU0004) – 003 which includes a PM emission limitation for Boilers 1, 2, 3, and 4 under 10 CSR 10-5.030 and the Core Permit Requirements which restricts PM emissions into the ambient air under 10 CSR 10-6.170. The installation is also required to maintain and operate particulate matter control devices – Permit Condition (EU0001 through EU0004) -003 requires electrostatic precipitators on Boilers 1, 2, 3, and 4 under 40 CFR 64 and Permit Condition EU0014 – 001 requires baghouses on the Dry Fly Ash System under 10 CSR 10-6.060. If the installation applies for a Prevention of Significant Deterioration Permit they will be required to undergo refined modeling to demonstrate that their new equipment will not cause or contribute to a PM<sub>2.5</sub> NAAQS violation per 40 CFR 52.21(k)(1). If any new applicable PM<sub>2.5</sub> emission regulations are promulgated, the Title V permit shall be reopened for cause no later than 18 months after promulgation of the newly applicable requirement unless the effective date of the newly applicable requirement is later than the date on which the permit is due to expire per the requirements of  $\S70.7(f)(1)(i)$ .

### Comment No. 10, submitted by the Interdisciplinary Environmental Clinic:

The Title V permit fails to include the plant's obligation to monitor its CO<sub>2</sub> emissions:

• Title V permits must include all applicable requirements under the Clean Air Act. The Clean Air Act requires Ameren - Labadie to monitor its carbon dioxide emissions, but the permit fails to include the Labadie Plant's CO<sub>2</sub> monitoring requirements.

#### Missouri Air Pollution Control Program Response to Public Comment:

The installation has an Acid Rain Permit which they are required to adhere to; therefore, no changes to the Title V permit are necessary. This Acid Rain Permit has been included within the Title V permit as Attachment F to demonstrate compliance with 10 CSR 10-6.270 and the requirements of 40 CFR Parts 72, 73, and 75 through 78. On page 2 of the Acid Rain Permit under Monitoring Requirements (1):

"The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75."

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The comments submitted via e-mail on Thursday, October 21, 2010 by Stacy Allen, Missouri Air Pollution Control Program – Emission Inventory Unit Chief, shall now be addressed. Comments may have been summarized, abbreviated, or paraphrased for clarity and brevity.

#### Comment No. 1, submitted by Stacy Allen:

The Title V permit has the old EIQ due date of June 1 on page 31 of 70. The Title V permit states that the reporting period is the 12 month period, but Ameren - Labadie is also required to submit an ozone season worksheet for the 3 month peak ozone season. Ameren – Labadie has included PM condensable in their 2008 and 2009 EIQs, and the numbers in their actual emissions table appear to have been pulled prior to PM CON being added.

### Missouri Air Pollution Control Program Response to Public Comment:

The installation's EIQ due date was revised to concur with 10 CSR 10-6.110(4)(D): "The full emissions report is due April 1 after each reporting year. If the full emissions report is filed electronically via MoEIS, this due date is extended to May 1.

Further discussions with Ms. Allen have clarified that the installation is no longer required to complete and submit an ozone season worksheet. Instead the installation's ozone season emissions are calculated through MoEIS based upon the following data elements reported by the installation: emission factors, summer throughputs (percent), hours/day in operation, days/week in operation, and weeks/year in operation data for each emission unit. The data elements listed are a few of the thirty-four (34) data elements listed in Table 3 of 10 CSR 10-6.110, these data elements are used to calculate the installation's actual emissions of reportable pollutants for each calendar year.

The Reported Air Pollutant Emissions table on Page 4 of the Title V permit has been updated to include a column for the installation's reported emissions of PM CON. The Controlled Potential to Emit on Page 4 of the Statement of Basis has also been updated to include potential PM CON emissions from the installation's boilers.

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The comments submitted orally during the Public Hearing held on Thursday, October 21, 2010, by Robyn Dunkin, Labadie resident, shall now be addressed. Comments may have been summarized, abbreviated, or paraphrased for clarity and brevity. Comments relating to issues outside of the Missouri Department of Natural Resources' purview of authority have not been included within these responses.

### Comment No. 1, submitted by Robyn Dunkin:

I am concerned that when Ameren is found in violation of Clean Air standards they pay their fine but continue to operate without correcting the cause of the violation.

Facilities in violation of the Clean Air Act receive opportunities to correct problems; the department's staff is committed to working through problems and developing mutually satisfactory resolutions whenever possible. If facilities do not resolve their problems by performing the required corrective actions to achieve compliance, and paying a fine, if applicable, the facility may be referred to the Attorney General's Office for litigation. For additional information regarding Missouri Department of Natural Resources' enforcement process please refer to our Department Compliance Manual available at: <a href="http://www.dnr.mo.gov/compliancemanual/chapters/2enforcementprocess.pdf">http://www.dnr.mo.gov/compliancemanual/chapters/2enforcementprocess.pdf</a>.

#### Comment No. 2, submitted by Robyn Dunkin:

Often there is a lot of smoke coming from one or more of the stacks at the plant:

- What is in that smoke?
- How are the stack emissions being monitored?
- How can I access the plant's monitoring reports?

# Missouri Air Pollution Control Program Response to Public Comment:

All of AmerenUE – Labadie's boilers are dry bottom, tangentially-fired pulverized coal boilers. As the boilers are all of the same type, the emissions from each smoke stack should be similar and consist of: particulate matter (PM), sulfur oxides ( $SO_x$ ), nitrogen oxides ( $SO_x$ ), volatile organic compounds ( $SO_x$ ), carbon monoxide ( $SO_x$ ), nitrogen oxides ( $SO_x$ ), volatile organic compounds ( $SO_x$ ), ammonia ( $SO_x$ ), and water vapor ( $SO_x$ ). Additional information regarding the installation's stack emissions is available within the installation's annual Emission Inventory Questionnaire (EIQ). Citizens of the public may request this information from the Air Pollution Control Program by submitting a Sunshine Request.

Each of Labadie's boiler stacks are equipped with monitoring systems. These monitoring systems include: a  $SO_x$  continuous emissions monitoring system (CEMS), a  $NO_x$  CEMS, a  $CO_2$  CEMS, and a continuous opacity monitoring system (COMS). The installation has performed stack testing to verify their emission rates of particulate matter  $\leq 10$  microns (PM<sub>10</sub>) and condensable PM (PM CON).

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The comments submitted orally during the Public Hearing held on Thursday, October 21, 2010, by Ruth Campbell, Labadie resident, shall now be addressed. Comments may have been summarized, abbreviated, or paraphrased for clarity and brevity. Comments relating to issues outside of the Missouri Department of Natural Resources' purview of authority have not been included within these responses.

#### Comment No. 1, submitted by Ruth Campbell:

What effects do Ameren – Labadie's air emissions have on our health and environment?

This operating permit is being issued under Title V of the Clean Air Act and 40 CFR Part 70 to assure compliance by the source with all applicable requirements for regulated air pollutants. EPA has established these requirements based on the harmful health effects of the regulated air pollutants. General information about the health and environmental effects of these pollutants is available on EPA's website:

Pollutant	EPA's health and environmental effects link
Ozone	http://www.epa.gov/air/ozonepollution/health.html
Particulate Matter	http://www.epa.gov/air/particlepollution/health.html
Carbon Monoxide	http://www.epa.gov/air/urbanair/co/hlth1.html
Nitrogen Oxides	http://www.epa.gov/air/nitrogenoxides/health.html
Sulfur Dioxide	http://www.epa.gov/air/sulfurdioxide/health.html
Hazardous Air Pollutant	
Greenhouse Gases	http://www.epa.gov/climatechange/effects/index.html

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The comments submitted orally during the Public Hearing held on Thursday, October 21, 2010, by Sue Blaine, shall now be addressed. Comments may have been summarized, abbreviated, or paraphrased for clarity and brevity. Comments relating to issues outside of the Missouri Department of Natural Resources' purview of authority have not been included within these responses.

#### Comment No. 1, submitted by Sue Blaine:

One evening I was sitting on a deck at a home adjacent to Ameren – Labadie and I observed black streams rising from the stacks at the power plant, against a very blue sky. My observation was not an isolated incident.

### Missouri Air Pollution Control Program Response to Public Comment:

Ameren - Labadie is subject to a 20% opacity standard with a six minute exception during which 40% opacity is allowed as required by 10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants and applied within Permit Condition (EU0001 through EU0004) – 002 of the Title V permit. Ameren – Labadie monitors opacity using a certified continuous opacity monitoring system. If the stack opacity exceeded the above listed standard, the installation's continuous opacity monitoring system will have recorded this information for appropriate enforcement action.

The Missouri Air Pollution Control Program regularly inspects Part 70 installations. Inspections are generally performed by enforcement staff from one of the Missouri Air Pollution Control Program's five regional offices. Ameren – Labadie's last air pollution inspection occurred December 1, 2009. Mr. Scott Hoffman of the Missouri Air Pollution Control Program's St. Louis Regional Office performed the inspection and found the installation to be in compliance with all applicable requirements at the time of inspection. The St. Louis Regional Office serves Franklin, Gasconade, Jefferson, Lincoln, Montgomery, St. Charles, St. Louis, and Warren counties as well

as the City of St. Louis. The St. Louis Regional Office can be reached at (314) 416-2960. The St. Louis Regional Office accepts complaints and tries to investigate and respond to complaints within a few days.

To file a compliant with EPA about an environmental violation in your area please visit: <a href="http://www.epa.gov/compliance/complaints/index.html">http://www.epa.gov/compliance/complaints/index.html</a>.

### Comment No. 2, submitted by Sue Blaine:

As Ameren requests a permit to allow emissions into the atmosphere, I ask that they be required to significantly decrease the quantity of material released into the atmosphere. Once these compounds are released, they cannot be collected for disposal. Instead, these materials become part of the air we breathe.

I do not believe that Ameren should be allowed to pollute the air, putting some people's health and well-being at risk.

Ameren should not be allowed to run the Labadie Plant in violation of established emission limits. They must operate responsibly toward all members of our society.

Please ensure that the Title V permit Ameren is requesting decreases the volume of material emitted, enforces those limits, closely monitors emissions, and includes penalties for violations which are substantial enough to encourage environmentally responsible behavior.

### Missouri Air Pollution Control Program Response to Public Comment:

The Title V permit contains all applicable requirements [as defined within 10 CSR 10-6.020(2)(A)23] for the Labadie plant. The emission limitations within the Title V permit were established to be protective of the ambient air quality. EPA has established national standards for the ambient air quality to protect human health and well-being. The Missouri Air Pollution Control Program cannot lower the emission standards currently imposed upon Ameren – Labadie unless emissions from the facility cause or contribute to a violation of the national ambient air quality standards per RSMo. 643.055.

Monitoring, recordkeeping, and reporting requirements to demonstrate compliance with each of the applicable requirements are part of the Title V permit. The installation is routinely inspected to ensure compliance with their permitted limits. Penalties are not included within Title V permits as penalties are imposed in response to enforcement action to ensure future compliance by removing the economic benefit of continued noncompliance.

#### Comment No. 3, submitted by Sue Blaine:

Ameren must protect future generations by decreasing emissions which contribute to global warming.

The Title V permit has been revised to state that Ameren – Labadie is a major source of greenhouse gases (CO<sub>2</sub>e) in the installation descriptions on the cover page and on page 4. Plantwide potential CO<sub>2</sub>e emissions have been included within the Potential to Emit table within the Title V permit's Statement of Basis. There are no further Missouri or federal requirements for greenhouses gases applicable to the installation at this time.

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The comments submitted orally during the Public Hearing held on Thursday, October 21, 2010, by Michael Berg, Missouri Sierra Club organizer, shall now be addressed. Comments may have been summarized, abbreviated, or paraphrased for clarity and brevity. Comments relating to issues outside of the Missouri Department of Natural Resources' purview of authority have not been included within these responses.

### Comment No. 1, submitted by Michael Berg:

The Sierra Club is very concerned about Ameren – Labadie's CO<sub>2</sub> emission and the impact these emissions have on the climate.

The Sierra Club would like monitoring and reporting of CO<sub>2</sub> emission included within the Title V permit.

# Missouri Air Pollution Control Program Response to Public Comment:

The Title V permit has been revised to state that Ameren – Labadie is a major source of greenhouse gases (CO<sub>2</sub>e) in the installation descriptions on the cover page and on page 4. Plantwide potential CO<sub>2</sub>e emissions have been included within the Potential to Emit table within the Title V permit's Statement of Basis. There are no further Missouri or federal requirements for greenhouses gases applicable to the installation at this time.

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The comments submitted orally during the Public Hearing held on Thursday, October 21, 2010, by Christina Alt, Labadie resident, shall now be addressed. Comments may have been summarized, abbreviated, or paraphrased for clarity and brevity. Comments relating to issues outside of the Missouri Department of Natural Resources' purview of authority have not been included within these responses.

# Comment No. 1, submitted by Christina Alt:

The Missouri Department of Natural Resources should include control, monitoring, and reporting requirements for hazardous air pollutants and fine particulate matter within the Title V permit.

The Title V permit has been revised to include reported and potential emissions of PM<sub>2.5</sub>.

Missouri's particulate standards address PM. The definition of PM within Missouri's regulations [at 10 CSR 10-6.020(2)(P)4] includes PM<sub>2.5</sub>. PM from the installation's boilers is controlled under 10 CSR 10-5.030 and 40 CFR Part 64 [see Permit Condition (EU0001 through EU0004) – 003 within the Title V permit].

Missouri has three years of ambient air monitoring data demonstrating compliance with the 1997 and 2006 PM<sub>2.5</sub> National Ambient Air Quality Standards (NAAQS). Upon EPA approval Franklin County will be redesignated an attainment maintenance area for the 1997 PM<sub>2.5</sub> NAAQS and an attainment area for the 2006 PM<sub>2.5</sub> NAAQS.

Ozone is not directly emitted from the installation. Ozone is formed in the atmosphere by a chemical reaction between oxides of nitrogen ( $NO_x$ ) and volatile organic compounds (VOCs). The Title V permit contains multiple conditions regulating the emissions of  $NO_x$  and VOCs.  $NO_x$  emissions from the boilers are controlled under the Acid Rain Program and the Clean Air Interstate Rule (CAIR). The installation is required to maintain a current Acid Rain permit and CAIR permit within Permit Conditions (EU0001 through EU0004) – 004 and (EU0001 through EU0004) – 005, respectively. VOC emissions from the installation's parts washers and refueling stations are controlled under 10 CSR 10-5.300 and 10 CSR 10-5.220, respectively (see Permit Conditions EU0012 – 001 and EU0013 – 001).

There are no regulations controlling hazardous air pollutants (HAPs) currently applicable to the installation's boilers; however, EPA has proposed a regulation controlling HAPs from electric utilities. Upon promulgation of this regulation the Title V permit shall be reopened to include the applicable requirements. HAPs from the installation's fire pumps are controlled through proper maintenance and operation under 40 CFR Part 63, Subpart ZZZZ (see Permit Condition EU0007 – 002).

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The comments submitted orally during the Public Hearing held on Thursday, October 21, 2010, by Petra Haynes, Labadie resident, shall now be addressed. Comments may have been summarized, abbreviated, or paraphrased for clarity and brevity. Comments relating to issues outside of the Missouri Department of Natural Resources' purview of authority have not been included within these responses.

### Comment No. 1, submitted by Petra Haynes:

Ameren doesn't operate scrubbers on all of their boilers stacks. Scrubbers reduce emissions.

Ameren says coal is the cheapest source of energy, but when asked why they haven't installed scrubbers they claim scrubbers are too expensive. If proper emission controls are required, is coal really the cheapest energy source?

The purpose of a Title V permit is to consolidate all of the installation's applicable requirements from construction permits and state and federal regulations into one legal document. Title V permits should aid the permitted facility in complying with and the Missouri Air Pollution Control Program, EPA, and the public in enforcing the Clean Air Act. Title V permits look at equipment already in operation or permitted to be constructed – Title V permits do not permit new equipment or plant modifications; therefore, no cost analyses were performed during the drafting of this Title V permit. Cost analyses are performed when establishing Best Available Control Technology (BACT) limitations within construction permits and Maximum Achievable Control Technology (MACT) limitations.

It is not within the Missouri Air Pollution Control Program's purview of authority to determine the cheapest source of energy for Ameren's customers.

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The comments submitted orally during the Public Hearing held on Thursday, October 21, 2010, by Kay Genovese, Labadie resident, shall now be addressed. Comments may have been summarized, abbreviated, or paraphrased for clarity and brevity. Comments relating to issues outside of the Missouri Department of Natural Resources' purview of authority have not been included within these responses.

# Comment No. 1, submitted by Kay Genovese:

During a tour of the Ameren plant last summer, I noticed that carports had been built. I commented to my tour guide, "Oh, you all get to park in the shade now."

He said, "Well, it's not for parking in the shade. *Stuff* has been falling from the sky and eating all the paint off of our cars. That's why they gave us carports."

There must be increased emissions. One of my neighbors has lived on one of Labadie's highest hills, just east or southeast of the plant, for about 40 years. Every day for the past few years, my neighbor wipes this gritty, grayish substance off of her outdoor glass table tops, off of the cover on her hot tub, and it didn't happen 20 years ago. It didn't happen ten years ago. There truly must be more particulate matter coming out of the plant, because she's far away from a road, way up on a hill, and this didn't happen at her house years ago.

# Missouri Air Pollution Control Program Response to Public Comment:

Franklin County is an attainment area for particulate matter  $\leq$  10 microns (PM<sub>10</sub>). The county is currently designated nonattainment for the 1997 PM<sub>2.5</sub> National Ambient Air Quality Standard (NAAQS); however, the Missouri Air Pollution Control Program has submitted 3 years of ambient air monitoring data documenting compliance with the 1997 and 2006 PM<sub>2.5</sub> NAAQS which, upon EPA approval, would redesignate the county as a maintenance area for the 1997 PM<sub>2.5</sub> NAAQS and an attainment area for the 2006 PM<sub>2.5</sub> NAAQS.

Particulate modeling has not been performed for the installation as they have never undergone Prevention of Significant Deterioration (PSD) permitting. While the Missouri Air Pollution Control Program cannot rule out Ameren - Labadie as the source of the gritty substance upon the patio table and hot tub there are many other sources from which the substance may be coming, such as tree pollen, plant pollen, nearby homes with fireplaces, or nearby construction areas.

The comments submitted orally during the Public Hearing held on Thursday, October 21, 2010, by Patricia Schuba, Labadie resident, shall now be addressed. Comments may have been summarized, abbreviated, or paraphrased for clarity and brevity. Comments relating to issues outside of the Missouri Department of Natural Resources' purview of authority have not been included within these responses.

### Comment No. 1, submitted by Patricia Schuba:

The Title V permit refers to the handling of dry ash waste:

- What is the composition of this coal ash waste?
- How much of this waste does the installation handle?
- What happens to the particulate matter collected by the baghouses?
- Is this the handling of this dry ash waste subject to the strictest possible means of monitoring and control of particulates?

### Missouri Air Pollution Control Program Response to Public Comment:

The Dry Fly Ash System at the installation was permitted for construction in 1992. At that time potential emissions from the system were calculated to 8.2 tons/year of  $PM_{10}$  (as contained within Construction Permit No. 0792-006). The potential calculations used a factor of 92%  $PM_{10}$  within the fly ash as obtained from Table 1.1-6 within AP-42. The same table gives a factor of 53%  $PM_{2.5}$  within the fly ash yielding a potential emissions calculation for the Dry Fly Ash System of 4.72 tons/year  $\sim 1.08$  lbs  $PM_{2.5}$  per hour. In 2006, Ameren – Labadie began recycling more than 10,000 tons of fly ash and 60,000 tons of bottom ash annually. This ash is used to produce about two million bags of high-quality concrete mix annually and reduces the potential emissions from Ameren – Labadie's fly ash ponds included within the dry fly ash system.

EPA has determined that coal combustion residuals (fly ash, bottom ash, and boiler slag) are non-hazardous secondary materials that can be used as legitimate ingredients to form secondary products with the caveat that coal combustion residuals that are discarded, rather than being put to beneficial use, are considered solid wastes subject to the requirements of the Resource Conservation and Recovery Act (RCRA). For more information, please review EPA's February 21, 2011 pre-publication of 40 CFR Part 241 *Identification of Non-Hazardous Secondary Materials That Are Solid Waste* available at:

http://www.epa.gov/epawaste/nonhaz/define/pdfs/final-pre-pub.pdf.

The comments submitted orally during the Public Hearing held on Thursday, October 21, 2010, by Celeste Nohl Smith, Labadie resident, shall now be addressed. Comments may have been summarized, abbreviated, or paraphrased for clarity and brevity. Comments relating to issues outside of the Missouri Department of Natural Resources' purview of authority have not been included within these responses.

### Comment No. 1, submitted by Celeste Nohl Smith:

Apparently the Missouri Department of Natural Resources is trying to make regulations, but our big corporate businesses can just bully their way past these regulations in their permits.

### Missouri Air Pollution Control Program Response to Public Comment:

EPA has passed a number of National Ambient Air Quality Standards (NAAQS) to protect the air within the US. These NAAQS are health-based standards. To date the EPA has passed NAAQS regulating the concentration of carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO<sub>2</sub>), ozone (O<sub>3</sub>), particulate matter  $\leq$  10 microns (PM<sub>10</sub>), particulate matter  $\leq$  2.5 microns (PM<sub>2.5</sub>), and sulfur dioxide (SO<sub>2</sub>). Franklin county is currently labeled an attainment area for all of the above listed pollutants other than PM<sub>2.5</sub> and O<sub>3</sub>.

The Missouri Air Pollution Control Program (APCP) has submitted three (3) years of PM<sub>2.5</sub> monitoring data demonstrating compliance with the 1997 and 2006 PM<sub>2.5</sub> NAAQS. Upon EPA's approval of this monitoring data, Franklin county will be redesignated a maintenance area for the 1997 PM<sub>2.5</sub> NAAQS and an attainment area for the 2006 PM<sub>2.5</sub> NAAQS.

Ozone is not directly emitted. Ozone is formed in the atmosphere by a chemical reaction between oxides of nitrogen  $(NO_x)$  and volatile organic compounds (VOCs). In order to achieve compliance with the  $O_3$  NAAQS, the APCP passed a number of laws regulating the emissions of VOC and  $NO_x$  in the St. Louis area (City of St. Louis, Franklin county, Jefferson county, St. Charles county, and St. Louis county).

The Title V permit for Ameren – Labadie contains multiple conditions regulating the emissions of  $NO_x$  and VOCs.  $NO_x$  emissions from the boilers are controlled under the Acid Rain Program and the Clean Air Interstate Rule (CAIR). The installation is required to maintain a current Acid Rain permit and CAIR permit within Permit Conditions (EU0001 through EU0004) – 004 and (EU0001 through EU0004) – 005, respectively. VOC emissions from the installation's parts washers and refueling stations are controlled under 10 CSR 10-5.300 and 10 CSR 10-5.220, respectively (see Permit Conditions EU0012 – 001 and EU0013 – 001).

The comments submitted orally during the Public Hearing held on Thursday, October 21, 2010, by George Lorentz, Labadie resident, shall now be addressed. Comments may have been summarized, abbreviated, or paraphrased for clarity and brevity. Comments relating to issues outside of the Missouri Department of Natural Resources' purview of authority have not been included within these responses.

#### Comment No. 1, submitted by George Lorentz:

I really like the idea that we have people from the Missouri Department of Natural Resources here to take our opinions, but is this public hearing considered in any way legal and binding in your decisions?

I highly recommend that the plant not be shut down, but to have a whole army of people from the Missouri Department of Natural Resources come here and fix the problems mentioned during this public hearing.

#### Missouri Air Pollution Control Program Response to Public Comment:

The official transcript from the public hearing, this Response to Public Comments document, and the revised Title V permit are being sent to the EPA for a 45 day review. During this review EPA is given the chance to comment on the Title V permit and this Response to Public Comments document. EPA grants the Missouri Air Pollution Control Program the authority to issue Title V permits. If EPA does not find the Title V permit draft by the Missouri Air Pollution Control Program acceptable they request changes. If Missouri does not make changes requested by the EPA, EPA can instead issue their own Title V permit to Ameren – Labadie under 40 CFR Part 71.

The Missouri Air Pollution Control Program regularly inspects Part 70 installations. Inspections are generally performed by enforcement staff from one of the Missouri Air Pollution Control Program's five regional offices. Ameren – Labadie's last air pollution inspection occurred December 1, 2009. Staff from the Missouri Department of Natural Resources' St. Louis Regional Office performed the inspection and found the installation to be in compliance with all applicable requirements at the time of inspection. The St. Louis Regional Office serves Franklin, Gasconade, Jefferson, Lincoln, Montgomery, St. Charles, St. Louis, and Warren counties as well as the City of St. Louis. The St. Louis Regional Office can be reached at (314) 416-2960. The St. Louis Regional Office accepts complaints and tries to investigate and respond to complaints within a few days.

The comments submitted orally during the Public Hearing held on Thursday, October 21, 2010, by Fred Thatcher, Labadie resident, shall now be addressed. Comments may have been summarized, abbreviated, or paraphrased for clarity and brevity. Comments relating to issues outside of the Missouri Department of Natural Resources' purview of authority have not been included within these responses.

### Comment No. 1, submitted by Fred Thatcher:

I have seen ash in the downtown area of Labadie. It may be falling from the sky or it could be coming off the tires of the trucks and cars that go to Ameren - Labadie. I believe there are 300 plus cars and another 100 or so trucks a day that go to Ameren - Labadie.

My offices were in Labadie for 12 or 13 years. I had to wash my building twice a year to remove black stuff. Emissions that come off trucks, tires, cars, et cetera, have not been addressed. I would ask that the EPA put a monitoring device in downtown Labadie to monitor  $PM_{2.5}$ .

### Missouri Air Pollution Control Program Response to Public Comment:

The installation is a major source of PM<sub>2.5</sub> in an area currently designated nonattainment for PM<sub>2.5</sub>; however, the Missouri Air Pollution Control Program has submitted three (3) years of PM<sub>2.5</sub> monitoring data demonstrating compliance with both the 1997 and the 2006 PM<sub>2.5</sub> NAAQS. Upon EPA approval the area will be redesignated an attainment maintenance area for the 1997 PM<sub>2.5</sub> NAAQS and an attainment area for the 2006 PM<sub>2.5</sub> NAAQS. There are no PM<sub>2.5</sub> specific regulations at this time; however, PM<sub>2.5</sub> is regulated within Permit Condition (EU0001 through EU0004) – 003 which includes a PM emission limitation for Boilers 1, 2, 3, and 4 under 10 CSR 10-5.030 and the Core Permit Requirements which restricts PM emissions into the ambient air under 10 CSR 10-6.170. The installation is also required to maintain and operate particulate matter control devices – Permit Condition (EU0001 through EU0004) -003 requires electrostatic precipitators on Boilers 1, 2, 3, and 4 under 40 CFR 64 and Permit Condition EU0014 - 001 requires baghouses on the Dry Fly Ash System under 10 CSR 10-6.060. If the installation applies for a Prevention of Significant Deterioration Permit they will be required to undergo refined modeling to demonstrate that their new equipment will not cause or contribute to a PM<sub>2.5</sub> NAAQS violation per 40 CFR 52.21(k)(1). If any new applicable PM<sub>2.5</sub> emission regulations are promulgated, the Title V permit shall be reopened for cause no later than 18 months after promulgation of the newly applicable requirement unless the effective date of the newly applicable requirement is later than the date on which the permit is due to expire per the requirements of  $\S70.7(f)(1)(i)$ .

The Title V permit is more stringent than the installation's current Title V permit OP2000-080A issued in 2000. Within the new Title V permit [see Permit Condition (EU0008 through EU0011) – 001] the installation is required to perform Best Management Practices to reduce visible emissions (the main source of the visible emissions being particulate matter) from haul roads. The draft permit is only for the installation. Employees' personal vehicles and Labadie's city streets do not fall under the purview of this permit.

An EPA representative attended the public hearing and is aware of your request for a  $PM_{2.5}$  monitoring device in Labadie, Missouri.

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The comments submitted orally during the Public Hearing held on Thursday, October 21, 2010, by Elizabeth Shinkle, Labadie resident, shall now be addressed. Comments may have been summarized, abbreviated, or paraphrased for clarity and brevity. Comments relating to issues outside of the Missouri Department of Natural Resources' purview of authority have not been included within these responses.

### Comment No. 1, submitted by Elizabeth Shinkle:

In the heat of this summer, there was a period of time when I could feel ammonia nitrate burning me. There was a period when I could smell and taste sulfur that was coming out of Ameren - Labadie.

I believe there was a great change in some chemical coming out of Ameren - Labadie, perhaps copper. There are ammonia sulfates and chromium dioxide... chromium nitrates...

I have had some problems with a chemical in my field called isopropyl toluene. Isopropyl toluene has been ranked highly toxic. The chemical is in my groundwater.

I had my blood analyzed. The results show that I am withholding in my body: benzene, nickel sulfate, phenyls, and fluorides.

#### Missouri Air Pollution Control Program Response to Public Comment:

All of Ameren – Labadie's boilers are dry bottom, tangentially-fired pulverized coal boilers. As the boilers are all of the same type the emissions from each smoke stack should be fairly similar and consist of: particulate matter (PM), sulfur oxides ( $SO_x$ ), nitrogen oxides ( $SO_x$ ), volatile organic compounds ( $SO_x$ ), carbon monoxide ( $SO_x$ ), carbon dioxide ( $SO_x$ ), hazardous air pollutants ( $SO_x$ ), ammonia ( $SO_x$ ), and water vapor ( $SO_x$ ). Additional information regarding the installation's stack emissions is available within the installation's annual Emission Inventory Questionnaire ( $SO_x$ ). Citizens of the public may request this information from the Missouri Air Pollution Control Program by submitting a Sunshine Request.

Ameren – Labadie has not performed stack testing for HAPs. Ameren – Labadie's HAP emissions were calculated using emission factors from AP-42 and FIRE for pulverized coal, dry bottom, tangentially-fired boilers.

Ammonium nitrate (NH<sub>4</sub>NO<sub>3</sub>, CAS No. 6484-52-2) is not a listed HAP under the Clean Air Act. Ammonium nitrate is not a listed emission from pulverized coal, dry bottom, tangentially-fired boilers within either AP-42 or FIRE. Ammonium nitrate is a white crystalline solid commonly used in high-nitrogen fertilizers and as an oxidizing agent in explosives.

Copper (Cu) is not a listed HAP under the Clean Air Act, neither are copper compounds. Copper compounds are not a listed emission from pulverized coal, dry bottom, tangentially-fired boilers within either AP-42 or FIRE. Copper compounds are generally blue or green salts. Copper compounds can be found in nutritional supplements and agricultural fungicides.

Benzene ( $C_6H_6$ , CAS No. 71-43-2) is a listed HAP under the Clean Air Act. Ameren – Labadie does emit benzene; however, there are no currently promulgated standards applicable to the installation's benzene emissions. For more information on the health effects of benzene visit: http://www.epa.gov/ttn/atw/hlthef/benzene.html

Ammonium sulfate ( $(NH_4)_2SO_4$ , CAS No. 7783-20-2) is not a listed HAP under the Clean Air Act. Ammonium sulfate is not a listed emission from pulverized coal, dry bottom, tangentially-fired boilers within either AP-42 or FIRE. Ammonium sulfate is an inorganic salt. Ammonium sulfate is commonly used as a fertilizer to reduce soil pH.

Chromium dioxide (CrO<sub>2</sub>, CAS No. 12018-01-8) would be included in the chromium compounds (20-06-4) aggregate group listed as a HAP under the Clean Air Act. Ameren – Labadie does emit chromium; however, there are no currently promulgated standards applicable to the installation's chromium emissions. For more information on the health effects of chromium visit: <a href="http://www.epa.gov/ttn/atw/hlthef/chromium.html">http://www.epa.gov/ttn/atw/hlthef/chromium.html</a>.

Chromium nitrate (Cr(NO<sub>3</sub>)<sub>3</sub>, CAS No. 13548-38-4) would be included in the chromium compounds (20-06-4) aggregate group listed as a HAP under the Clean Air Act. Ameren – Labadie does emit chromium; however, there are no currently promulgated standards applicable to the installation's chromium emissions. For more information on the health effects of chromium visit:

http://www.epa.gov/ttn/atw/hlthef/chromium.html.

Isopropyl toluene (C<sub>10</sub>H<sub>14</sub>, CAS No. 99-87-6) also referred to as cymene is not a listed HAP under the Clean Air Act. Isopropyl toluene is not a listed emission from pulverized coal, dry bottom, tangentially-fired boilers within either AP-42 or FIRE. Isopropyl toluene is a colorless liquid. Isopropyl toluene is a component of many essential oils, such as cumin and thyme.

Nickel sulfate (NiSO<sub>4</sub>, CAS No. 7786-81-4) would be included in the nickel compounds (20-14-4) aggregate group listed as a HAP under the Clean Air Act. Ameren – Labadie does emit nickel; however, there are no currently promulgated standards applicable to the installation's nickel emissions. For more information on the health effects of nickel visit: <a href="http://www.epa.gov/ttn/atw/hlthef/nickel.html">http://www.epa.gov/ttn/atw/hlthef/nickel.html</a>.

Phenyl is a functional group with the formula  $C_6H_5$ . Phenol ( $C_6H_5OH$ , CAS No. 108-95-2) is one of the simplest phenyls and is a listed HAP under the Clean Air Act. Ameren – Labadie does emit phenol; however, there are no currently promulgated standards applicable to the installation's phenol emissions. For more information on the health effects of phenol visit: <a href="http://www.epa.gov/ttn/atw/hlthef/phenol.html">http://www.epa.gov/ttn/atw/hlthef/phenol.html</a>.

Fluorides commonly refer to compounds contains fluorine. Hydrogen fluoride (HF, CAS No. 7664-39-3) is a listed HAP under the Clean Air Act. Ameren – Labadie does emit hydrogen fluoride; however, there are no currently promulgated standards applicable to the installation's hydrogen fluoride emissions. For more information on the health effect of hydrogen fluoride visit: <a href="http://www.epa.gov/ttn/atw/hlthef/hydrogen.html">http://www.epa.gov/ttn/atw/hlthef/hydrogen.html</a>.

The comments submitted orally during the Public Hearing held on Thursday, October 21, 2010, by Ron Holloway, Labadie resident, shall now be addressed. Comments may have been summarized, abbreviated, or paraphrased for clarity and brevity. Comments relating to issues outside of the Missouri Department of Natural Resources' purview of authority have not been included within these responses.

#### Comment No. 1, submitted by Ron Holloway:

I also have horses. I moved here in 1996. I bought a small farm so that I could have horses with my family. My wife takes care of our horses better than most people take care of their children.

Since we have been there, we have buried two horses, a donkey, two cats and a dog - all under 15 years old. These were not old animals. We currently have a horse with tumors all over his body, his carotid artery, and we don't know what his outcome is going to be.

I think there is something going on in the air.

During the renovations of our farm when we moved in, we needed to take down a barn that was falling down. We contacted the Fire Chief Casey to get permission to burn the barn and find out if they would be interested in burning the barn as a training exercise. He indicated that they were interested, but that we also needed to contact our local Missouri Department of Natural Resources' representative.

The Department of Natural Resources' representative said we could not burn down the barn as it would release too many toxins into the air and proceeding without written permission would result in a fine of \$10,000.

That being said, it is hard to hear the accusations against Ameren and their lack of respect for our community, our laws, and our regulations. They are allowed to do whatever they want anytime. Several people have used the term bully. I agree. Unfortunately, even an organization like the Missouri Department of Natural Resources' gets bullied, because it is Ameren and there is a lot of money involved.

I would like to see the plant shut down. We moved here assuming that our government would take care of us. We knew there was a power plant here, but we assumed that because we live in the USA, there were agencies to take care of us and make sure we were safe.

The Missouri Department of Natural Resources was so concerned about the air pollution from the burning of a small barn that they were going to charge us \$10,000 if we proceeded. What is the fine for Ameren – Labadie's air pollution?

## Missouri Air Pollution Control Program Response to Public Comment:

A fact sheet on Missouri's open burning regulations is available at:

http://www.dnr.mo.gov/pubs/pub2047.pdf. The regulation, 10 CSR 10-6.045 Open Burning Requirements, can be viewed by visiting:

http://www.sos.mo.gov/adrules/csr/current/10csr/10c10-6a.pdf.

An open burning permit application is available at: <a href="http://www.dnr.mo.gov/forms/780-1941-f.pdf">http://www.dnr.mo.gov/forms/780-1941-f.pdf</a>.

The purpose of the Clean Air Act is not to shutdown industry, but instead to reduce air emissions from industry utilizing several paths, including Title V permits. Title V permits do not permit the construction of new equipment or the modification of existing equipment. Title V permits are meant to consolidate all applicable standards on existing equipment into one legal document to help the facility maintain compliance and state and federal agencies inspect the installation and enforce air regulations. Ameren – Labadie is in compliance with the provisions of the Title V permit which contains all applicable requirements from issued construction permits and state and federal regulations.

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The comments submitted orally during the Public Hearing held on Thursday, October 21, 2010, by Janet Dittrich, Labadie resident, shall now be addressed. Comments may have been summarized, abbreviated, or paraphrased for clarity and brevity. Comments relating to issues outside of the Missouri Department of Natural Resources' purview of authority have not been included within these responses.

#### Comment No. 1, submitted by Janet Dittrich:

The Labadie Environmental Organization is working to make industry environmental responsible. Get involved with our organization.

Thank you all for coming.

# Missouri Air Pollution Control Program Response to Public Comment:

The Missouri Department of Natural Resources is always supportive of public input. To view and comment on draft permits and regulations please visit our new Public Notice website at: <a href="http://www.dnr.mo.gov/public-notices.htm">http://www.dnr.mo.gov/public-notices.htm</a>.

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The comments submitted electronically via e-mail on Friday, October 22, 2010, by Cheryl McQuerry, Labadie resident, shall now be addressed. Comments may have been summarized, abbreviated, or paraphrased for clarity and brevity. Comments relating to issues outside of the Missouri Department of Natural Resources' purview of authority have not been included within these responses.

#### Comment No. 1, submitted by Cheryl McQuerry:

I have information which documents changes in the environment surrounding the Ameren power plant.

I have lived 7.8 miles from Labadie for about 25 years. I live on 14.4 acres with a small one acre lake on my property. The lake has been there for about 23 years. I dug, built, and stocked the lake. It is a spring fed lake located at the bottom of a hill. The lake is fed from drainage that comes from the area surrounding it, including 750 feet of road frontage. This road was gravel until the year before last when it was paved with asphalt. I have owned horses for the entire 25 years. I have fertilized my land for the past 20 years, excluding the area surrounding the lake (to avoid runoff into the lake).

In the summer of 2010, I had a very strange occurrence on my lake. The entire lake was covered by a growth that seemed to multiply on itself. I contacted Robert Bryant from the EPA, Paul Morris from the Missouri Department of Natural Resources, and Kevin Arnold, Scott Huffman and Rob Pulliam from the Missouri Department of Conservation. This growth was killing my fish and I was a concerned for my horses and the wildlife that use this lake as a water source. Mr. Pulliam returned from his vacation and took the time to come out with another unidentified gentleman. They came to the conclusion that the growth was a plant known as Azolla, or water fern. This is a native Missouri plant that is hardly ever seen in the field. In Mr. Pulliam's 20 years of experience, he had never seen it. The Missouri Botanical Garden confirmed the species as Azolla Mexicana. I have attached a picture of the lake. I had to run a sump pump into a circle of pool noodles for a period of about 2 months in order to save some of my fish.

There are changes to the environment happening....Why?

There were no changes in the use of the land, the amount of horses kept on the land, etc...

## Missouri Air Pollution Control Program Response to Public Comment:

Azolla Mexicana is a rare fern native to North, Central and South America. Young plants are generally bright green and turn shades of pink, red, and/or brown as the plant matures and is exposed to strong sunlight. The fern has developed a symbiotic relationship with a blue-green cyanobacterium, Anabaena Azollae. The cyanobacterium absorbs nitrogen from the air. The fern provides minerals to the cyanobacterium in exchange for nitrogen, allowing the fern to grow in nitrogen deficient waters not generally suitable for fern growth. The cyanobacterium can be cultivated and used as a fertilizer or as a nutritional supplement for livestock feed. The fern can reproduce through the fragmentation of plants or sexually through the production of spores. Dispersal of plant fragments or spores occurs by water, wind, fish, waterfowl, and humans. The

fern generally prefers still, shallow waters where they propagate quickly and typically carpet the water. The fern generally dies off during the fall and winter and reappears during the spring and summer.

As Azolla Mexicana is native to Missouri and was likely transferred to the lake by waterfowl or fish, it is difficult to link the ferns appearance to the emissions from Ameren - Labadie. To obtain more information regarding Azolla Mexicana please visit the following link: <a href="http://dsp-psd.pwgsc.gc.ca/collection/2009/ec/CW69-14-568-2009E.pdf">http://dsp-psd.pwgsc.gc.ca/collection/2009/ec/CW69-14-568-2009E.pdf</a>.

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The comments submitted electronically via e-mail on Friday, October 22, 2010, by Dave Greely, Labadie resident, shall now be addressed. Comments may have been summarized, abbreviated, or paraphrased for clarity and brevity. Comments relating to issues outside of the Missouri Department of Natural Resources' purview of authority have not been included within these responses.

#### Comment No. 1, submitted by Dave Greely:

I request stack testing be conducted on Ameren – Labadie by an outside resource.

## Missouri Air Pollution Control Program Response to Public Comment:

The Missouri Air Pollution Control Program requires Ameren to notify our program a month prior to performing stack testing so that an observer from our program's enforcement section can be onsite during the testing. This requirement only applies when Ameren is conducting stack testing which they plan to use to document compliance with an air regulation, if the stack testing is for the installation's personal use an observer is not required.

## Comment No. 2, submitted by Dave Greely:

Please advise me where I can find current data on the plant's emissions.

# Missouri Air Pollution Control Program Response to Public Comment:

A table of the installation's emissions was included within the Title permit. The table has been copied below for your convenience:

Reported Air Pollutant Emissions, tons per year					
	2009	2008	2007	2006	2005
Particulate Matter $\leq$ Ten Microns (PM <sub>10</sub> )	1230.99	1254.28	1350.56	1312.43	1338.23
Particulate Matter $\leq 2.5$ Microns (PM <sub>2.5</sub> )	308.21	328.37	-	-	486.64
Condensable Particulate Matter (PM CON)	1284.70	1117.71		-	-
Sulfur Oxides (SO <sub>x</sub> )	61681.45	57944.63	58328.14	51443.35	55501.28
Nitrogen Oxides (NO <sub>x</sub> )	9205.35	9170.39	9997.44	9315.25	9503.63
Volatile Organic Compounds (VOC)	298.74	299.61	325.48	318.45	326.75
Carbon Monoxide (CO)	2490.94	2494.32	2709.32	2650.70	2719.96
Lead (Pb)	0.04	-	-	-	- ,
Hazardous Air Pollutants (HAPs)	267.49	197.01	303.79	351.39	354.37
Ammonia (NH <sub>3</sub> )	2.81	2.82	-	-	-

These emissions totals come from the installation's annual Missouri Emissions Inventory Questionnaire (EIQ). More detailed EIQ data is available. Citizens of the public may request this information by submitting a sunshine request. The installation is not required to submit CO<sub>2</sub> data to the Missouri Department of Natural Resources within their annual EIQ; however, this data is available on EPA's Clean Air Markets website at: http://camddataandmaps.epa.gov/gdm/index.cfm.

Missouri has a monitoring network to evaluate ambient air quality within our state. To view Missouri's air quality data please visit: http://www.dnr.mo.gov/env/esp/aqm/esp-aqm.htm.

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The comments submitted electronically via e-mail on Friday, October 22, 2010, by Patricia Schuba on the behalf of Marie Horn, Labadie resident, shall now be addressed. Comments may have been summarized, abbreviated, or paraphrased for clarity and brevity. Comments relating to issues outside of the Missouri Department of Natural Resources' purview of authority have not been included within these responses.

## Comment No. 1, submitted by Marie Horn:

My husband worked at the plant as a guard. PM coming from the operations and got on everything, including cars.

I am concerned about livestock eating the grass contaminated by PM and heavy metals. I am also concerned about eating food grown in an area contaminated by PM and heavy metals.

I am concerned about my family's exposure to PM within the air.

My home was built in 1964. I used to wash windows and they would stay clean. Since Ameren – Labadie began operations, a blue tint develops on my windows within 3 days.

## Missouri Air Pollution Control Program Response to Public Comment:

Franklin County is an attainment area for particulate matter  $\leq$  10 microns (PM<sub>10</sub>). The county is currently designated nonattainment for the 1997 PM<sub>2.5</sub> National Ambient Air Quality Standard (NAAQS); however, the Missouri Air Pollution Control Program has submitted 3 years of ambient air monitoring data documenting compliance with the 1997 and 2006 PM<sub>2.5</sub> NAAQS which, upon EPA approval, would redesignate the county as a maintenance area for the 1997 PM<sub>2.5</sub> NAAQS and an attainment area for the 2006 PM<sub>2.5</sub> NAAQS.

Particulate modeling has not been performed for the installation as they have never undergone Prevention of Significant Deterioration (PSD) permitting; however, the installation may have to undergo a PSD review in order to resolve their EPA issued NOV. While the Missouri Air Pollution Control Program cannot rule out AmerenUE - Labadie as the source of the gritty substance upon Ms. Siege's patio table and hot tub there are many other sources from which the substance may be coming from such as tree pollen, plant pollen, nearby homes with fireplaces, or nearby construction areas.

Heavy metals are particulate emissions, but more specifically they are hazardous air pollutants (HAPs). The installation is a major source of HAPs; however, there are no currently promulgated regulations applicable to the installation. The EPA has proposed a regulation, National Emission Standards for Hazardous Air Pollutants for Coal- and Oil-fired Electric Utility Steam Generating Units, which should address the installation's HAP emissions. The EPA projects a promulgation date of March 2011, for the regulation.

#### Comment No. 2, submitted by Marie Horn:

Recent I have been woken up in the middle of the night by very load noises coming from Ameren – Labadie. Sometimes my house rattles

## Missouri Air Pollution Control Program Response to Public Comment:

The Clean Air Act does not provide noise pollution controls. There may be County or City noise ordinances in place that may apply to the installation. The installation is not subject to noise pollution regulation by the State of Missouri at this time. For more information regarding noise pollution please visit: <a href="http://www.epa.gov/air/noise.html#protection">http://www.epa.gov/air/noise.html#protection</a>.

The comments submitted electronically via e-mail on Friday, October 22, 2010, by Jan Mound and Ray Jaycox, Labadie residents, shall now be addressed. Comments may have been summarized, abbreviated, or paraphrased for clarity and brevity. Comments relating to issues outside of the Missouri Department of Natural Resources' purview of authority have not been included within these responses.

#### Comment No. 1, submitted by Jan Mound and Ray Jaycox:

Will there be constant monitoring of air emissions from Ameren – Labadie?

## Missouri Air Pollution Control Program Response to Public Comment:

Each of Labadie's boiler stacks are equipped with monitoring systems. These monitoring systems include: a  $SO_x$  continuous emissions monitoring system (CEMS), a  $NO_x$  CEMS, a  $CO_2$  CEMS, and a continuous opacity monitoring system (COMS). The installation has performed stack testing to verify their emission rates of particulate matter  $\leq 10$  microns (PM<sub>10</sub>) and condensable PM (PM CON).

Continuous emissions monitoring is not required for every emission source at the installation. The primary source of emissions from the installation are the boiler stacks which account for 95% of the installations total emissions. The other emission sources are smaller and only require periodic monitoring.

The Title V permit only contains monitoring for air emissions from regulated sources. Monitoring of other emissions from the installation are dealt with in the installation's other Department of Natural Resources' issued permits.

#### Comment No. 2, submitted by Jan Mound and Ray Jaycox:

Will there be ash transferred from other plants by boat, rail, or truck and if there is, who will monitor the blow off from these vehicles?

## Missouri Air Pollution Control Program Response to Public Comment:

Ameren – Labadie is not permitted to receive fly ash from other installations within the Title V permit.

#### Comment No. 3, submitted by Jan Mound and Ray Jaycox:

Recently I have noticed an excessive amount of a grayish dust when I use my leaf blower and when I cleaned the skylights on my roof. Is this dust toxic?

## Missouri Air Pollution Control Program Response to Public Comment:

The Missouri Air Pollution Control Program cannot rule out Ameren - Labadie as the source of the grayish dust; however, there are many other sources from which the substance may be coming from such as tree pollen, plant pollen, nearby homes with fireplaces, or nearby construction areas.

Franklin County is an attainment area for particulate matter  $\leq$  10 microns (PM<sub>10</sub>). The county is currently designated nonattainment for the 1997 PM<sub>2.5</sub> National Ambient Air Quality Standard (NAAQS); however, the Missouri Air Pollution Control Program has submitted 3 years of ambient air monitoring data documenting compliance with the 1997 and 2006 PM<sub>2.5</sub> NAAQS which, upon EPA approval, would redesignate the county as a maintenance area for the 1997 PM<sub>2.5</sub> NAAQS and an attainment area for the 2006 PM<sub>2.5</sub> NAAQS.

Particulate modeling has not been performed for the installation as they have never undergone Prevention of Significant Deterioration (PSD) permitting; however, the installation may have to undergo a PSD review in order to resolve their EPA issued NOV.

EPA has determined that coal combustion residuals (fly ash, bottom ash, and boiler slag) are non-hazardous secondary materials that can be used as legitimate ingredients to form secondary products with the caveat that coal combustion residuals that are discarded, rather than being put to beneficial use, are considered solid wastes subject to the requirements of the Resource Conservation and Recovery Act (RCRA). For more information, please review EPA's February 21, 2011 pre-publication of 40 CFR Part 241 *Identification of Non-Hazardous Secondary Materials That Are Solid Waste* available at: http://www.epa.gov/epawaste/nonhaz/define/pdfs/final-pre-pub.pdf.

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The comments submitted electronically via e-mail on Friday, October 22, 2010, by Gloria and Ken Sennert, Catawissa residents, shall now be addressed. Comments may have been summarized, abbreviated, or paraphrased for clarity and brevity. Comments relating to issues outside of the Missouri Department of Natural Resources' purview of authority have not been included within these responses.

#### Comment No. 1, submitted by Gloria and Ken Sennert:

We have lived in Franklin County for over 25 years. I have been tested, and my levels of mercury and lead are high. I was also diagnosed with lymphoma, and studies are showing that the counties surrounding the Labadie plant have higher rates of cancer than areas not near such a polluting power plant.

For people's health and for the future of Planet Earth, we need the Labadie power plant to stop emitting such unacceptably large amounts of hazardous air pollutants. There needs to be more visibility of company actions.

Please do not issue Ameren an operating permit without stipulating that they can no longer continue to put out such polluting emissions. The permit needs to bring the Labadie plant into compliance with the Clean Air Act to reduce these toxic emissions, as well as increase monitoring of such to make sure the facility stops emitting these huge amounts of toxins.

## Missouri Air Pollution Control Program Response to Public Comment:

The Title V permit has been revised to state that Ameren – Labadie is a major source of greenhouse gases (CO<sub>2</sub>e) in the installation descriptions on the cover page and on page 4. Plantwide potential CO<sub>2</sub>e emissions have been included within the Potential to Emit table within the Title V permit's Statement of Basis. There are no further Missouri or federal requirements for greenhouses gases applicable to the installation at this time.

The installation is a major source of hazardous air pollutants (HAPs); however, there are no currently promulgated regulations applicable to the installation. The EPA has proposed a regulation, National Emission Standards for Hazardous Air Pollutants for Coal- and Oil-fired Electric Utility Steam Generating Units, which should address the installation's HAP emissions. The EPA projects a promulgation date of March 2011 for the regulation. Until the regulation is promulgated it is not applicable to the installation and cannot be incorporated in the Title V permit.

Ameren – Labadie is in compliance with the provisions of the Title V permit which contains all applicable requirements from issued construction permits and state and federal regulations. The Missouri Air Pollution Control Program cannot arbitrarily impose limitations on the installation due to RSMo. 643.055 (see <a href="http://www.moga.mo.gov/statutes/C600-699/6430000055.HTM">http://www.moga.mo.gov/statutes/C600-699/6430000055.HTM</a>) which states that Missouri cannot be more stringent than the Clean Air Act.

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The comments submitted electronically via e-mail on Friday, October 22, 2010, by Gerry Friedman, Labadie resident, shall now be addressed. Comments may have been summarized, abbreviated, or paraphrased for clarity and brevity. Comments relating to issues outside of the Missouri Department of Natural Resources' purview of authority have not been included within these responses.

#### Comment No. 1, submitted by Gerry Friedman:

The evidence of air and water pollution in the area of the Ameren power plant at Labadie that has surfaced as a result of residents' opposition to a landfill for coal waste here causes grave concern. The letter of the law at this moment in time may "permit" a certain level of pollutants, but that does not excuse your agency (and/or the federal government) from strict monitoring and requiring prompt correction of known excesses and violations. To use the phrase "in accordance with current law" as an excuse for lax and tardy attention is inexcuseable!

It is our hope that the specific concerns voiced at your hearing will be addressed individually in your response, and that the steps required to correct them will be made public promptly.

#### Missouri Air Pollution Control Program Response to Public Comment:

Ameren – Labadie is in compliance with the provisions of the Title V permit which contains all applicable requirements from issued construction permits and state and federal regulations. The Missouri Air Pollution Control Program cannot arbitrarily impose limitations on the installation due to RSMo. 643.055 (see <a href="http://www.moga.mo.gov/statutes/C600-699/6430000055.HTM">http://www.moga.mo.gov/statutes/C600-699/6430000055.HTM</a>) which states that Missouri cannot be more stringent than the Clean Air Act.

The installation is a major source of hazardous air pollutants (HAPs); however, there are no currently promulgated regulations applicable to the installation. The EPA has proposed a regulation, National Emission Standards for Hazardous Air Pollutants for Coal- and Oil-fired Electric Utility Steam Generating Units, which should address the installation's HAP emissions. The EPA projects a promulgation date of March 2011, for the regulation. Until the regulation is promulgated it is not applicable to the installation and cannot be incorporated in the Title V permit.

EPA has determined that coal combustion residuals (fly ash, bottom ash, and boiler slag) are non-hazardous secondary materials that can be used as legitimate ingredients to form secondary products with the caveat that coal combustion residuals that are discarded, rather than being put to beneficial use, are considered solid wastes subject to the requirements of the Resource Conservation and Recovery Act (RCRA). For more information, please review EPA's February 21, 2011 pre-publication of 40 CFR Part 241 *Identification of Non-Hazardous Secondary Materials That Are Solid Waste* available at: http://www.epa.gov/epawaste/nonhaz/define/pdfs/final-pre-pub.pdf.

Since the receipt of the official transcript of the public hearing the Missouri Air Pollution Control Program has been diligently working to respond to the comments contained within this Response to Public Comments document. Missouri cannot be more stringent than the Clean Air Act and does not have the authority to amend the Clean Air Act.

To file a compliant with EPA about an environmental violation in your area please visit: <a href="http://www.epa.gov/compliance/complaints/index.html">http://www.epa.gov/compliance/complaints/index.html</a>.

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#### **EPA Comment No. 1:**

#### Permit Condition (EU0001 through EU0004)-003

As part of the 40 C.F.R. Part 64 Compliance Assurance Monitoring (CAM), page 9 and 10 of the permit lists operational limitations for Boilers 1, 2, 3, and 4.

- 1. The permittee shall perform stack testing using Method 17 for filterable PM and Method 202 or Method OTM28 for condensable PM within one year of the effective date of this operating permit.
  - a) The permittee shall submit a Proposed Stack Test Plan to the Air Pollution Control Program no later than 30 days prior to the date of stack testing so that the test plan may be reviewed and approved and an observer may be present during the testing.
- 2. The permittee shall apply for an operating permit significant modification to update the CAM monitoring approach within 6 months of completion of the above required stack testing. The significant modification application shall include stack testing results and a new filterable PM to Opacity correlation along with proposed opacity levels for excursions and exceedances. All calculations for the correlation shall be included as well as explanations for the determination of the excursion and exceedance levels.
- 3. The permittee shall perform **repeat stack testing** (bold added) every three years. No later than 6 months after each stack test the installation is required to revise the filterable PM to Opacity correlation to account for particulate emission distribution changes due to boiler aging.

Operation limitation "1." specifies which test methods are allowable in developing PM CAM for the Ameren Labadie power plant. EPA understands that operational limitation "3." to mean that Ameren will be required to perform repeat stack testing as in operational limitation "1." Nonetheless, others might read this requirement to be vague because the test methods to be performed are not exclusively listed in the limitation. Consistent with 40 C.F.R. §70.6(3)(A), please list the testing requirements as they apply in operational limitation "3."

## Missouri Air Pollution Control Program Response to EPA Comment:

Operational Limitation 3 has been revised as requested and now reads:

- 3. The permittee shall perform repeat stack testing every three years:
  - a) The permittee shall submit a Proposed Stack Test Plan to the Air Pollution Control Program no later than 30 days prior to the date of stack testing so that the test plan may be reviewed and approved and an observer may be present during the testing.
  - b) The permittee shall perform the stack testing using Method 17 for filterable PM and Method 202 or Method OTM28 for condensable PM.
  - c) The permittee shall apply for an operating permit significant modification to update the CAM monitoring approach within 6 months of completion of the above required repeat stack testing. The significant modification application shall include stack testing results and a new filterable PM to Opacity correlation along with proposed opacity levels for excursions and exceedances. All calculations for the correlation shall be included as well as explanations for the determination of the excursion and exceedance levels.

#### **EPA Comment No. 2:**

## Public Comments Regarding EPA-issued Notice of Violation (NOV)

On page 2 of the MDNR's *Response to Public Comments*, there is a discussion in respect to the NOV that was sent to Ameren January 16, 2010.

EPA has not resolved the NOV; therefore, it can not be said definitively that Ameren skipped permitting processes. The NOV was issued due to different interpretations of the term "routine maintenance, repair and replacement" (RMRR). The proper interpretation of RMRR has been an ongoing issue between the electric industry and EPA nationwide for a number of years. Ameren is not being allowed to skip any permitting processes. If EPA decides that Ameren misinterpreted RMRR, thereby violating New Source Review requirements, then Ameren will be required to complete the necessary construction permitting processes for those activities.

EPA suggests that MDNR remove this paragraph in their final response to comments. The NOV does make reference 40 C.F.R. §52.21(b)(2)(iii)(a) or routine maintenance, repair, and replacement, often referred to as RMRR. Ameren has not shared an RMRR analysis with EPA or MDNR. Therefore, MDNR should not comment on the applicability of an RMRR exemption in regard to projects at the Labadie power plant.

# Missouri Air Pollution Control Program Response to EPA Comment:

The paragraph has been removed as requested.

#### **EPA Comment No. 3:**

## Public Comments Regarding Compliance with the Title V Permit

On pages 41 and 42 of the MDNR's *Response to Public Comments*, MDNR states that Labadie is in compliance with the provisions of the Title V permit which contains all applicable requirements from issued construction permits and federal requirements. However, EPA notes the NOV in January 16, 2010 alleges that Ameren failed to meet certain New Source Review and Title V permitting requirements at the Labadie power plant. Even though EPA issued an NOV to the facility, MDNR should not put a compliance schedule in the Title V permit. EPA considers the potential impact enforcement cases and Title V decisions have on one another. In cases where EPA has initiated an enforcement action at the same time as the permitting authority is taking action on a title V permit application, the source and EPA could find themselves in two separate actions, litigating essentially the same issues – whether a substantive rule was violated and the appropriateness of a compliance schedule – with the risk of potentially different and conflicting results. Such proceedings are best left out of the Title V permitting process. Once limits are established in a construction permit, consent decree, or court order, the requirements would then be included in a Title V permit.

#### Missouri Air Pollution Control Program Response to EPA Comment:

The Missouri Air Pollution Control Program would like to thank EPA for this clarification and agrees that in this situation the appropriateness of a compliance schedule is best handled outside of the Title V permitting process.

ALR/kjc